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Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water
Part 3 (Revised 1985)

Tetra Tech, Inc., Lafayette, CA

Prepared for

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16. ABSTRACT

New technical developments in the field of water quality assessment and a re-ordering of water quality priorities prompted a revision of the first two editions of this manual. The utility of the revised manual is enhanced by the inclusion of methods to predict the transport and fate of toxic chemicals in ground water and to predict the fate of metals in rivers. In addition, major revisions were completed on Chapters 2, (organic toxicants), 3 (waste loadings), 5 (impoundments) that reflect recent advancements in these fields.

Applying the manuals's simple techniques, the user is now capable of assessing the loading and fate of conventional pollutants (temperature, biochemical oxygen demand-dissolved oxygen, nutrients, and sediments) and toxic pollutants (from the list of U.S. EPA priority pollutants) in streams, impoundments, estuaries, and ground waters. The techniques are readily programmed on hand-held calculators or microcomputers. Most of the data required for using these procedures is contained in the manual.

Because of its size, the manual has been divided into three parts. Part II contains chapters on assessment of impoundments, estuaries, and ground water and appendices E, H, I and J. Part III contains appendices D, F and G on microfiche, provided in an envelope on the inside back cover of Part II. Appendices A, B and C, which appeared in the first two editions, are now out of date and have been deleted.

17. KEY WORDS AND DOCUMENT ANALYSIS

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TABLE 12

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.02

```
                                      DENSIMETRIC FROUDE NUMBER

                       1            3            10           30           100          1000
RISE(DIA)    ---------------------------------------------------------------------------------
             : T)                                                                             :
             : M)              2.1(  0.4)   2.0(  0.0)   2.0(  0.0)   2.0(  0.0)   2.0(  0.0) :
    1        :        1.9          2.6          3.8          5.8          9.7         17.8    :
             : T)                                                                             :
             : M)                                                                             :
    2        :        2.7          3.1          4.4          6.7         11.2         33.1    :
             : T)                                                                             :
             : M)                                                                             :
    3        :        3.6          3.5          4.8          7.4         12.3         36.7    :
             : T)                                                                             :
             : M)  4.2(  3.7)                                                                 :
    4        :        4.5          3.9          5.1          7.8         13.2         39.6    :
             : T)                                                                             :
             : M)                                                                             :
    5        :        5.4          4.3          5.4          8.2         13.9         42.2    :
             : T)                                                                             :
             : M)                                                                             :
    7        :        6.9          5.0          6.0          8.9         15.0         46.5    :
             : T)                                                                             :
             : M)                                                                             :
    9        :        8.4          5.7          6.4          9.5         16.0         50.2    :
             : T)                                                                55.3( 12.1)  :
             : M)                                                                             :
   12        :       10.4          6.8          7.0         10.2         17.3                 :
             : T)                                                                             :
             : M)                                                                             :
   15        :       12.6          7.8          7.6         10.8         18.2         60.4    :
             : T)                                                                             :
             : M)                                                                             :
   20        :       15.9          9.5          8.5         11.7         19.8                 :
             : T)                                                                             :
             : M)                                                                             :
   25        :       19.2         11.2          9.3         12.5         21.1                 :
             : T)                                                     22.3( 29.6)             :
             : M)                                                                             :
   33        :       23.9         13.7         10.6         13.6         23.2                 :
             : T)  25.5( 35.8)                                                                :
             : M)                                                                             :
   42        :       28.6         16.5         12.0         14.9         25.8                 :
             : T)              18.0( 47.8)  13.8( 54.0)  15.1( 44.2)                          :
             : M)                                                                             :
   54        :                    19.7                      16.5                              :
             : T)                                                                             :
             : M)                                                                             :
   70        :                    23.5         16.2         19.5                              :
             : T)                                                                             :
             : M)                                                                             :
             ---------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  40.5( 52.2)  27.4( 70.8)  19.9( 83.6)  20.5( 71.6)  29.3( 48.4)  73.9( 19.6)
```

TABLE 13

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.02

		DENSIMETRIC FROUDE NUMBER					
RISE(DIA)		1	3	10	30	100	1000
	: T)						
	: M)		2.1(0.4)	2.0(0.0)	2.0(0.0)	2.0(0.0)	2.0(0.0)
1	:	1.9	2.6	3.8	5.8	9.7	27.8
	: T)						
	: M)						
2	:	2.7	3.1	4.4	6.7	11.2	33.1
	: T)						
	: M)						
3	:	3.6	3.5	4.8	7.4	12.3	36.7
	: T)						
	: M)	4.2(3.7)					
4	:	4.5	3.9	5.1	7.8	13.2	39.4
	: T)						
	: M)						
5	:	5.4	4.3	5.4	8.2	13.8	41.9
	: T)						
	: M)						
7	:	6.9	5.0	5.9	8.9	15.0	45.9
	: T)						
	: M)						
9	:	8.4	5.7	6.4	9.5	15.9	49.1
	: T)						
	: M)						
12	:	10.5	6.8	7.0	10.1	17.0	53.0
	: T)						
	: M)						
15	:	12.6	7.8	7.6	10.7	18.0	56.8
	: T)						
	: M)						
20	:	16.2	9.6	8.5	11.6	19.4	61.8
	: T)						
	: M)						
25	:	19.7	11.3	9.3	12.3	20.5	66.4
	: T)						
	: M)						
33	:	25.3	14.0	10.7	13.4	22.2	72.9
	: T)						74.5(35.4)
	: M)						
42	:	31.3	17.1	12.2	14.5	23.8	80.0
	: T)						
	: M)						
54	:	39.1	21.1	14.1	15.9	25.6	91.1
	: T)						
	: M)						
70	:	48.6	26.2	16.7	17.6	28.0	
	: T)	50.3(73.6)				30.3(87.0)	
	: M)						
90	:	58.4	32.2	19.7	19.7	30.8	
	: T)		35.4(102.0)				
	: M)						
115	:		38.9	23.4	22.2	34.4	
	: T)			25.3(129.0)	23.1(124.0)		
	: M)						
146	:		47.2	27.8	25.7		
	: T)						
	: M)						
190	:			34.7	32.6		
	: T)						
	: M)						
DIL AT MAX PEAK OR PERMITTED RISE		98.0(107.0)	61.3(149.0)	41.1(194.0)	34.5(194.0)	41.2(143.0)	101.0(58.2)

TABLE 14

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.02

RISE(DIA)		DENSIMETRIC FROUDE NUMBER 1	3	10	30	100	1000
	T)						
	M)		2.1[0.4]	2.0[0.0]	2.0[0.0]	2.0[0.0]	2.0[0.0]
1		1.9	2.6	3.8	5.8	9.7	27.8
	T)						
	M)						
2		2.7	3.1	4.4	6.7	11.2	33.1
	T)						
	M)						
3		3.6	3.5	4.8	7.4	12.3	36.5
	T)						
	M)	4.2[3.7]					
4		4.5	3.9	5.1	7.8	13.2	39.4
	T)						
	M)						
5		5.4	4.3	5.4	8.2	13.8	41.6
	T)						
	M)						
7		6.9	5.0	5.9	8.9	14.9	45.5
	T)						
	M)						
9		8.4	5.7	6.4	9.5	15.9	48.8
	T)						
	M)						
12		10.6	6.8	7.0	10.1	17.0	52.[illegible]
	T)						
	M)						
15		12.7	7.8	7.6	10.7	18.0	56.1
	T)						
	M)						
20		16.3	9.6	8.5	11.6	19.3	60.8
	T)						
	M)						
25		19.8	11.4	9.3	12.3	20.4	64.5
	T)						
	M)						
33		25.4	14.1	10.7	13.4	22.0	70.1
	T)						
	M)						
42		31.8	17.3	12.2	14.4	23.5	75.2
	T)						
	M)						
54		40.2	21.4	14.2	15.8	25.2	81.2
	T)						
	M)						
70		51.2	26.9	16.9	17.4	27.2	88.2
	T)						
	M)						
90		64.8	33.8	20.1	19.4	29.6	96.1
	T)						
	M)						
115		81.1	42.2	24.1	21.8	32.7	105.0
	T)						107.0(123.0)
	M)						
140		101.0	52.8	29.4	25.1	35.6	116.0
	T)	112.0(167.0)					
	M)						
190		123.0	65.8	35.9	29.0	39.7	134.0
	T)		76.6(236.0)				
	M)						
244			80.9	43.9	34.0	45.0	
	T)					49.6(289.0)	
	M)						
DIL AT MAX PEAK OR PERMITTED RISE		161.0(243.0)	93.8(300.0)	51.7(300.0)	39.1(301.0)	50.8(301.0)	140.0(199.0)

TABLE 15

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.02

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	: M]		2.1[0.4]	2.0[0.0]	2.0[0.0]	2.0[0.0]	2.0[0.0]
1	:	1.9	2.6	3.8	5.8	9.7	27.8
	: M]						
2	:	2.7	3.1	4.4	6.7	11.2	33.1
	: M]						
3	:	3.6	3.5	4.8	7.4	12.3	36.5
	: M]	4.2[3.7]					
4	:	4.5	3.9	5.1	7.8	13.2	39.4
	: M]						
5	:	5.4	4.3	5.4	8.2	13.8	41.6
	: M]						
7	:	6.9	5.0	5.9	8.9	14.9	45.5
	: M]						
9	:	8.4	5.7	6.4	9.5	15.9	48.8
	: M]						
12	:	10.6	6.8	7.0	10.1	17.0	52.7
	: M]						
15	:	12.7	7.8	7.6	10.7	18.0	55.7
	: M]						
20	:	16.3	9.6	8.5	11.6	19.3	60.5
	: M]						
25	:	19.8	11.4	9.3	12.3	20.4	64.2
	: M]						
33	:	25.6	14.1	10.7	13.4	22.0	69.5
	: M]						
42	:	32.0	17.3	12.2	14.4	23.4	74.4
	: M]						
54	:	40.5	21.5	14.2	15.7	25.1	80.0
	: M]						
70	:	51.9	27.1	16.9	17.4	27.1	86.4
	: M]						
90	:	66.2	34.0	20.2	19.4	29.2	93.1
	: M]						
115	:	84.1	42.8	24.4	21.8	31.8	100.0
	: M]						
148	:	108.0	54.3	[illegible]	25.0	35.1	109.0
	: M]						
190	:	137.0	69.0	36.6	29.0	38.7	117.0
	: M]						
244	:	175.0	87.7	45.6	34.0	43.3	128.0
	: M]						

DIL AT MAX REAL
OR PERMITTED RISE 215.0(301.0) 107.0(300.0) 54.7(301.0) 39.2(301.0) 47.9(302.0) 137.0(300.0)

102

TABLE 16

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.00

```
                                 DENSIMETRIC FROUDE NUMBER

                    1            3            10           30           100          1000
RISE(DIA)  ----------------------------------------------------------------------------------
           : T)                                                                             :
           : M]              2.1[  0.4]   2.0[  0.0]   2.0[  0.0]   2.0[  0.0]   2.0[  0.0] :
    1      :       1.9          2.6          3.7          5.6          8.8          22.2     :
           : T)                                                                             :
           : M]                                                                             :
    2      :       2.7          3.0          4.2          6.3          10.1         25.4     :
           : T)                                                                             :
           : M]                                                                             :
    3      :       3.6          3.5          4.6          6.9          11.0         27.8     :
           : T)                                                                             :
           : M]  4.2[  3.6]                                                                 :
    4      :       4.5          3.8          4.9          7.3          11.7         29.6     :
           : T)                                                                             :
           : M]                                                                             :
    5      :       5.3          4.2          5.2          7.6          12.3         31.1     :
           : T)                                                                             :
           : M]                                                                             :
    7      :       6.8          4.9          5.7          8.2          13.2         33.8     :
           : T)                                                             34.0(  7.3) :
           : M]                                                                             :
    9      :       8.2          5.6          6.1          8.7          13.9         36.2     :
           : T)                                                                             :
           : M]                                                                             :
   12      :      10.2          6.6          6.6          9.3          14.9         40.8     :
           : T)                                                                             :
           : M]                                                                             :
   15      :      12.1          7.5          7.1          9.8          15.8                  :
           : T)                                                15.9( 15.8)                  :
           : M]                                                                             :
   20      :      15.1          9.0          8.0          10.6         17.0                  :
           : T) 16.1( 22.0)                            11.0( 23.2)                          :
           : M]                                                                             :
   25      :      17.6          10.5         8.7          11.3         18.7                  :
           : T)              11.3( 28.4)  9.3( 29.4)                                        :
           : M]                                                                             :
   33      :                    12.5         9.8          12.4                              :
           : T)                                                                             :
           : M]                                                                             :
   42      :                    14.1         10.8                                           :
           : T)                                                                             :
           : M]                                                                             :
           ----------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  20.1( 32.3)  14.2( 43.2)  11.6( 47.8)  13.8( 38.8)  19.9( 26.7)  42.8( 12.4)
```

TABLE 17

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.00

```
                                        DENSIMETRIC FROUDE NUMBER

                             1            3            10           30          100          1000
RISE(DIA)     -----------------------------------------------------------------------------------------
              : T)                                                                                    :
              : M)                    2.1( 0.4)    2.0( 0.0)    2.0( 0.0)    2.0( 0.0)    2.0( 0.0)   :
     1        :             1.9          2.6          3.7          5.6          8.8         22.2      :
              : T)                                                                                    :
              : M)                                                                                    :
     2        :             2.7          3.0          4.2          6.3         10.1         25.4      :
              : T)                                                                                    :
              : M)                                                                                    :
     3        :             3.6          3.5          4.6          6.9         11.0         27.7      :
              : T)                                                                                    :
              : M)      4.2(  3.6)                                                                    :
     4        :             4.5          3.8          4.9          7.3         11.6         29.2      :
              : T)                                                                                    :
              : M)                                                                                    :
     5        :             5.4          4.2          5.2          7.6         12.2         30.7      :
              : T)                                                                                    :
              : M)                                                                                    :
     7        :             6.8          4.9          5.6          8.2         13.1         32.9      :
              : T)                                                                                    :
              : M)                                                                                    :
     9        :             8.3          5.6          6.1          8.6         13.7         34.8      :
              : T)                                                                                    :
              : M)                                                                                    :
    12        :            10.3          6.6          6.6          9.2         14.6         37.2      :
              : T)                                                                                    :
              : M)                                                                                    :
    15        :            12.4          7.6          7.1          9.7         15.3         39.3      :
              : T)                                                                     39.8( 15.8)    :
              : M)                                                                                    :
    20        :            15.7          9.2          8.0         10.4         16.4         42.6      :
              : T)                                                                                    :
              : M)                                                                                    :
    25        :            18.9         10.8          8.7         11.1         17.3         46.5      :
              : T)                                                                                    :
              : M)                                                                                    :
    33        :            23.6         13.3          9.9         12.0         18.5                   :
              : T)     25.1( 35.9)                                        18.6( 33.8)                 :
              : M)                                                                                    :
    42        :            28.2         15.9         11.2         12.8         19.8                   :
              : T)                   17.5( 48.4)               13.5( 48.9)                            :
              : M)                                                                                    :
    54        :                         18.9         12.7         14.0         21.9                   :
              : T)                                13.0( 56.5)                                         :
              : M)                                                                                    :
    70        :                         21.8         14.6         15.3                                :
              : T)                                                                                    :
              : M)                                                                                    :
              -----------------------------------------------------------------------------------------

DIL AT MAX PEAK
OR PERMITTED RISE   31.5( 52.6)  22.0( 72.5)  16.3( 89.0)  16.8( 80.4)  23.3( 57.1)  49.7( 26.7)
```

TABLE 18

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.00

DENSIMETRIC FROUDE NUMBER

RISE(DIA)	1	3	10	30	100	1000
1	1.9	2.1(0.4) 2.6	2.0(0.0) 3.7	2.0(0.0) 5.6	2.0(0.0) 8.8	2.0(0.0) 22.0
2	2.7	3.0	4.2	6.3	10.1	25.4
3	3.6	3.5	4.6	6.9	11.0	27.5
4	4.2(3.7) 4.5	3.8	4.9	7.3	11.6	29.2
5	5.4	4.2	5.2	7.6	12.1	30.5
7	6.8	4.9	5.6	8.2	13.0	32.7
9	8.3	5.6	6.0	8.6	13.7	34.3
12	10.4	6.6	6.6	9.2	14.5	36.5
15	12.6	7.6	7.1	9.7	15.2	38.2
20	16.0	9.3	8.0	10.3	16.2	40.6
25	19.4	10.9	8.8	10.9	16.9	42.6
33	24.9	13.6	10.0	11.8	18.0	45.2
42	30.7	16.6	11.3	12.7	19.1	47.9 49.9(49.4)
54	38.3	20.4	13.1	13.7	20.2	51.2
70	47.7 49.9(74.4)	25.3	15.3	15.0	21.5	55.4
90	57.3	31.1 34.6(104.0)	18.1	16.6	22.9 23.9(104.0)	
115		37.3	21.4 23.9(136.0)	18.4 19.8(138.0)	24.6	
148		43.2	25.2	20.5	26.7	
190			29.0	22.9		
DIL AT MAX RISE OR PERMITTED RISE	62.5(108.0)	43.4(153.0)	29.9(207.0)	24.9(225.0)	30.0(178.0)	62.7(84.6)

TABLE 19

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.00

		DENSIMETRIC FROUDE NUMBER					
RISE(DIA)		1	3	10	30	100	1000
	T)						
	M)		2.1[0.4]	2.0[0.0]	2.0[0.0]	2.0[0.0]	2.0[0.0]
1		1.9	2.6	3.7	5.6	8.8	22.0
	T)						
	M)						
2		2.7	3.0	4.2	6.3	10.1	25.3
	T)						
	M)						
3		3.6	3.5	4.6	6.9	11.0	27.5
	T)						
	M)	4.2[3.7]					
4		4.5	3.8	4.9	7.3	11.6	29.0
	T)						
	M)						
5		5.4	4.2	5.2	7.6	12.1	30.5
	T)						
	M)						
7		6.9	4.9	5.6	8.2	13.0	32.7
	T)						
	M)						
9		8.3	5.6	6.0	8.6	13.6	34.3
	T)						
	M)						
12		10.5	6.6	6.6	9.2	14.5	36.2
	T)						
	M)						
15		12.6	7.6	7.1	9.7	15.1	38.0
	T)						
	M)						
20		16.1	9.3	8.0	10.3	16.1	40.2
	T)						
	M)						
25		19.6	11.0	8.8	10.9	16.9	42.0
	T)						
	M)						
33		25.1	13.7	10.0	11.8	17.9	44.5
	T)						
	M)						
42		31.3	16.7	11.4	12.6	18.9	46.8
	T)						
	M)						
54		39.6	20.7	13.2	13.7	19.9	49.2
	T)						
	M)						
70		50.5	26.0	15.6	15.0	21.2	52.0
	T)						
	M)						
90		63.9	32.7	18.5	16.7	22.5	54.8
	T)						
	M)						
115		79.7	40.8	22.3	18.5	23.9	58.0
	T)						
	M)						
148		99.6	50.9	27.1	20.9	25.6	61.5
	T)	111.0(169.0)					65.1(187.0)
	M)						
190		121.0	63.4	32.9	23.9	27.5	65.4
	T)		76.9(240.0)				
	M)						
244		139.0	77.8	40.2	27.6	29.8	70.3
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		139.0(245.0)	90.2(300.0)	47.4(300.0)	31.2(301.0)	31.9(302.0)	76.2(300.0)

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TABLE 20

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.00

```
                                  DENSIMETRIC FROUDE NUMBER

                     1             3             10            30            100           1000
RISE(DIA)  -------------------------------------------------------------------------------------------
           : M]                  2.1[  0.4]  2.0[  0.0]  2.0[  0.0]  2.0[  0.0]  2.0[  0.0]  :
    1      :         1.9           2.6           3.7           5.6           8.8          22.0     :
           : M]                                                                                  :
    2      :         2.7           3.0           4.2           6.3          10.1          25.3     :
           : M]                                                                                  :
    3      :         3.6           3.5           4.6           6.9          11.0          27.5     :
           : M]   4.2[  3.7]                                                                     :
    4      :         4.5           3.8           4.9           7.3          11.6          29.0     :
           : M]                                                                                  :
    5      :         5.4           4.2           5.2           7.6          12.1          30.5     :
           : M]                                                                                  :
    7      :         6.9           4.9           5.6           8.2          13.0          32.7     :
           : M]                                                                                  :
    9      :         8.3           5.6           6.0           8.6          13.6          34.3     :
           : M]                                                                                  :
   12      :        10.5           6.6           6.6           9.2          14.5          36.2     :
           : M]                                                                                  :
   15      :        12.6           7.6           7.1           9.7          15.1          38.0     :
           : M]                                                                                  :
   20      :        16.1           9.3           8.0          10.3          16.1          40.2     :
           : M]                                                                                  :
   25      :        19.6          11.0           8.8          10.9          16.9          42.0     :
           : M]                                                                                  :
   33      :        25.3          13.7          10.0          11.8          17.9          44.4     :
           : M]                                                                                  :
   42      :        31.5          16.8          11.4          12.6          18.9          46.5     :
           : M]                                                                                  :
   54      :        39.9          20.8          13.2          13.7          19.9          48.9     :
           : M]                                                                                  :
   70      :        51.2          26.2          15.7          15.0          21.1          51.5     :
           : M]                                                                                  :
   90      :        65.3          32.9          18.6          16.7          22.4          54.2     :
           : M]                                                                                  :
  115      :        82.5          41.3          22.5          18.5          23.8          56.9     :
           : M]                                                                                  :
  149      :       106.0          52.5          27.5          21.0          25.5          59.9     :
           : M]                                                                                  :
  190      :       135.0          66.6          33.8          24.1          27.3          63.0     :
           : M]                                                                                  :
  244      :       173.0          84.7          41.8          28.1          29.5          66.2     :
           : M]                                                                                  :
           -------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 212.0(301.0) 103.0(301.0)  50.2(301.0)  32.1(301.0)  31.7(301.0)  69.1(301.0)
```

TABLE 21

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.10

```
                                      DENSIMETRIC FROUDE NUMBER

                       1           3           10          30          100         1000
RISE(DIA)    ----------------------------------------------------------------------------------
             : T)                                                                             :
             : M]                         6.3[  1.0]  6.2[  0.1]  6.2[  0.0]  6.2[  0.0]      :
    1        :        1.9         2.8         6.4        11.8        22.2        85.6         :
             : T)                                                                             :
             : M]                                                                             :
    2        :        2.7         3.7         8.2        14.4        27.3       110.0         :
             : T)                                                            117.0(  2.4)     :
             : M]                                                                             :
    3        :        3.5         4.6         9.6        16.4        31.1       131.0         :
             : T)                                                                             :
             : M]                                                                             :
    4        :        4.5         5.6        10.9        18.2        34.3                     :
             : T)                                                                             :
             : M]                                                                             :
    5        :        5.6         6.6        12.0        20.0        37.3                     :
             : T)                                                41.6(  6.6)                  :
             : M]                                                                             :
    7        :        8.1         8.8        14.4        23.3        42.8                     :
             : T)                                                                             :
             : M]                 9.1[  7.3]                                                  :
    9        :       10.8        11.0        16.8        26.3        48.5                     :
             : T)                                    28.4( 10.3)                              :
             : M]                                                                             :
   12        :       15.4        14.0        20.4        31.3                                 :
             : T)                        23.1( 14.2)                                          :
             : M]  18.1[ 13.7]                                                                :
   15        :       20.3        17.0        24.4        36.7                                 :
             : T)  23.9( 17.7)  20.4( 18.3)                                                   :
             : M]                                                                             :
   20        :       26.9        22.5        33.1                                             :
             : T)                                                                             :
             : M]                                                                             :
   25        :                   34.1                                                         :
             : T)                                                                             :
             : M]                                                                             :
             ----------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  52.7( 24.4)  41.3( 25.6)  35.9( 20.8)  40.0( 16.0)  57.5( 10.6) 163.0(  3.8)
```

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TABLE 22

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.10

```
                                    DENSIMETRIC FROUDE NUMBER

                      1           3           10          30          100         1000
RISE(DIA)  ------------------------------------------------------------------------------
           : T)                                                                         :
           : M)                        6.3(  1.0)  6.2(  0.1)  6.2(  0.0)  6.2(  0.0)  :
    1      :         1.9         2.8         6.4        11.7        22.2        85.0    :
           : T)                                                                         :
           : M)                                                                         :
    2      :         2.7         3.7         8.2        14.3        27.1       107.0    :
           : T)                                                                         :
           : M)                                                                         :
    3      :         3.6         4.6         9.6        16.3        30.9       123.0    :
           : T)                                                                         :
           : M)                                                                         :
    4      :         4.5         5.6        10.8        18.1        33.8       137.0    :
           : T)                                                            146.0(  4.7) :
           : M)                                                                         :
    5      :         5.6         6.6        12.0        19.8        36.5       150.0    :
           : T)                                                                         :
           : M)                                                                         :
    7      :         8.1         8.8        14.2        22.9        41.3       180.0    :
           : T)                                                                         :
           : M)             9.3(  7.5)                                                  :
    9      :        10.9        10.9        16.4        26.0        45.9                :
           : T)                                                                         :
           : M)                                                                         :
   12      :        15.6        14.0        19.7        30.3        51.9                :
           : T)                                                54.2( 13.1)              :
           : M)  19.6( 14.3)                                                            :
   15      :        20.8        17.0        23.1        34.8        58.4                :
           : T)                                    40.5( 19.1)                          :
           : M)                                                                         :
   20      :        28.2        21.9        28.8        41.9        70.5                :
           : T)                        35.0( 24.9)                                      :
           : M)                                                                         :
   25      :        35.0        26.7        35.2        49.8                            :
           : T)  37.8( 27.3) 31.8( 30.0)                                                :
           : M)                                                                         :
   33      :        44.9        35.3        48.8                                        :
           : T)                                                                         :
           : M)                                                                         :
           ------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  87.4( 37.9)  68.4( 41.7)  56.6( 35.8)  58.1( 29.1)  75.2( 20.7) 204.0(  7.6)
```

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TABLE 23

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.10

```
                                            DENSIMETRIC FROUDE NUMBER

                     1             3            10            30           100          1000
RISE(DIA)  ------------------------------------------------------------------------------------------
           : T)                                                                                     :
           : M)                              6.3[  1.0]    6.2[  0.1]    6.2[  0.0]    6.2[  0.0]   :
     1     :       1.9           2.8           6.4          11.7          22.0          84.4        :
           : T)                                                                                     :
           : M)                                                                                     :
     2     :       2.7           3.7           8.2          14.3          27.1         105.0        :
           : T)                                                                                     :
           : M)                                                                                     :
     3     :       3.6           4.6           9.5          16.3          30.7         120.0        :
           : T)                                                                                     :
           : M)                                                                                     :
     4     :       4.5           5.6          10.8          18.1          33.6         132.0        :
           : T)                                                                                     :
           : M)                                                                                     :
     5     :       5.6           6.6          12.0          19.7          36.2         143.0        :
           : T)                                                                                     :
           : M)                                                                                     :
     7     :       8.1           8.7          14.2          22.8          40.8         161.0        :
           : T)                                                                                     :
           : M)                  9.4[  7.6]                                                         :
     9     :      10.9          10.9          16.3          25.8          44.9         176.0        :
           : T)                                                                                     :
           : M)                                                                                     :
    12     :      15.7          14.0          19.4          30.0          50.5         197.0        :
           : T)                                                                      206.0( 13.3)   :
           : M)   20.2[ 14.6]                                                                       :
    15     :      21.0          17.0          22.5          34.0          56.1         217.0        :
           : T)                                                                                     :
           : M)                                                                                     :
    20     :      28.8          21.8          27.7          40.8          64.4         257.0        :
           : T)                                                                                     :
           : M)                                                                                     :
    25     :      36.2          26.7          32.7          47.5          73.0                      :
           : T)                                                                                     :
           : M)                                                                                     :
    33     :      47.5          34.3          41.0          58.4          85.7                      :
           : T)                                                         68.1( 34.6)                 :
           : M)                                                                                     :
    42     :      59.7          42.8          51.2          70.5         101.0                      :
           : T)   74.0( 53.2)                             75.4( 45.6)                               :
           : M)                                                                                     :
    54     :      75.2          54.5          66.2          87.8                                    :
           : T)                 62.6( 62.3)   68.1( 55.4)                                           :
           : M)                                                                                     :
    70     :      95.2          71.5          93.7                                                  :
           : T)                                                                                     :
           : M)                                                                                     :
           ------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 181.0( 75.0) 143.0( 85.9) 114.0( 77.5) 109.0( 66.7) 123.0( 53.1) 288.0( 21.5)
```

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TABLE 24

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.10

```
                                     DENSIMETRIC FROUDE NUMBER

                        1            3           10           30          100         1000
RISE(DIA)   ------------------------------------------------------------------------------------
            : T)                                                                               :
            : M]                              6.3[  1.0]   6.2[  0.1]   6.2[  0.0]   6.2[  0.0]  :
    1       :          1.9          2.8          6.4         11.7         22.0         84.4      :
            : T)                                                                               :
            : M]                                                                               :
    2       :          2.7          3.7          8.2         14.3         27.1        105.0      :
            : T)                                                                               :
            : M]                                                                               :
    3       :          3.6          4.6          9.5         16.3         30.7        119.0      :
            : T)                                                                               :
            : M]                                                                               :
    4       :          4.5          5.6         10.8         18.1         33.6        131.0      :
            : T)                                                                               :
            : M]                                                                               :
    5       :          5.6          6.6         12.0         19.7         36.2        141.0      :
            : T)                                                                               :
            : M]                                                                               :
    7       :          8.1          8.7         14.1         22.8         40.8        157.0      :
            : T)                                                                               :
            : M]                 9.5[  7.7]                                                    :
    9       :         10.9         10.9         16.3         25.6         44.9        171.0      :
            : T)                                                                               :
            : M]                                                                               :
   12       :         15.7         14.0         19.4         29.8         50.5        189.0      :
            : T)                                                                               :
            : M]    20.4[ 14.7]                                                                :
   15       :         21.1         17.0         22.5         34.0         55.7        204.0      :
            : T)                                                                               :
            : M]                                                                               :
   20       :         29.0         21.8         27.5         40.5         63.9        227.0      :
            : T)                                                                               :
            : M]                                                                               :
   25       :         36.5         26.7         32.2         47.1         71.9        247.0      :
            : T)                                                                               :
            : M]                                                                               :
   33       :         48.5         34.3         40.2         57.6         84.4        276.0      :
            : T)                                                                               :
            : M]                                                                               :
   42       :         61.3         42.8         48.8         69.0         97.5        305.0      :
            : T)                                                                312.0( 44.2)   :
            : M]                                                                               :
   54       :         78.7         54.2         60.9         84.4        115.0        345.0      :
            : T)                                                                               :
            : M]                                                                               :
   70       :        101.0         69.5         77.1        105.0        138.0                   :
            : T)                                                                               :
            : M]                                                                               :
   90       :        128.0         88.2         98.6        131.0        166.0                   :
            : T)                                        162.0(113.0) 173.0( 95.3)              :
            : M]                                                                               :
  115       :        160.0        112.0        128.0        165.0        202.0                   :
            : T) 164.0(118.0) 138.0(142.0) 152.0(132.0)                                        :
            : M]                                                                               :
  148       :        200.0        145.0        177.0        212.0                                :
            : T)                                                                               :
            : M]                                                                               :
  190       :                     241.0                                                        :
            : T)                                                                               :
            : M]                                                                               :
            ------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 257.0(166.0) 318.0(195.0) 256.0(191.0) 232.0(161.0) 237.0(139.0) 351.0( 55.0)
```

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TABLE 25

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.10

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	: M]			6.3[1.0]	6.2[0.1]	6.2[0.0]	6.2[0.0]
1	:	1.9	2.8	6.4	11.7	22.0	84.4
	: M]						
2	:	2.7	3.7	8.2	14.3	27.1	105.0
	: M]						
3	:	3.6	4.6	9.5	16.3	30.7	119.0
	: M]						
4	:	4.5	5.6	10.8	18.0	33.6	131.0
	: M]						
5	:	5.6	6.6	12.0	19.7	36.2	141.0
	: M]						
7	:	8.1	8.7	14.1	22.8	40.8	157.0
	: M]		9.5[7.7]				
9	:	10.9	10.9	16.3	25.6	44.6	170.0
	: M]						
12	:	15.7	14.0	19.4	29.8	50.2	188.0
	: M]	20.5[14.7]					
15	:	21.1	17.0	22.3	33.8	55.7	203.0
	: M]						
20	:	29.0	21.8	27.3	40.5	63.9	223.0
	: M]						
25	:	36.7	26.7	32.2	47.1	71.4	242.0
	: M]						
33	:	48.5	34.3	39.9	57.2	83.8	267.0
	: M]						
42	:	61.8	42.8	48.5	68.5	96.7	291.0
	: M]						
54	:	79.3	54.1	60.1	83.8	114.0	320.0
	: M]						
70	:	103.0	69.5	75.0	104.0	136.0	355.0
	: M]						
90	:	132.0	88.2	93.8	128.0	164.0	
	: M]						
115	:	169.0	112.0	117.0	159.0	198.0	
	: M]						
148	:	216.0	143.0	149.0	200.0	242.0	
	: M]						
190	:	277.0	183.0	188.0	251.0	297.0	
	: M]						
244	:		234.0	239.0			
	: M]						
DIL AT MAX REAL OR PERMITTED RISE		333.0(228.0)	286.0(299.6)	284.0(294.0)	312.0(240.0)	315.0(204.0)	362.0(73.4)

TABLE 26

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.05

```
                                DENSIMETRIC FROUDE NUMBER

                      1           3           10          30          100         1000
RISE(DIA)   ---------------------------------------------------------------------------------
            : T)                                                                           :
            : M)                       5.7(  0.9)  5.6(  0.1)  5.6(  0.0)  5.6(  0.0)      :
    1       :        1.9         2.8       . 5.8         9.9        17.6        62.2       :
            : T)                                                                           :
            : M)                                                                           :
    2       :        2.7         3.6         7.1        11.8        21.3        77.6       :
            : T)                                                               90.4(  3.0) :
            : M)                                                                           :
    3       :        3.6         4.4         8.0        13.2        23.9                   :
            : T)                                                                           :
            : M)                                                                           :
    4       :        4.6         5.1         8.7        14.2        26.0       103.0       :
            : T)                                                                           :
            : M)                                                                           :
    5       :        5.6         6.0         9.4        15.2        28.0                   :
            : T)                                                                           :
            : M)                                                                           :
    7       :        8.1         7.6        10.6        16.9        31.3                   :
            : T)                                                   33.1(  8.1)             :
            : M)               9.2(  3.9)                                                  :
    9       :       10.8         9.4        11.8        18.6        34.5                   :
            : T)                                                                           :
            : M)                                                                           :
   12       :       15.4        11.7        13.5        21.0        40.2                   :
            : T)                                       21.6( 12.8)                         :
            : M)   18.0( 13.7)                                                             :
   15       :       20.0        13.8        15.1        23.4                               :
            : T)   23.4( 17.9)             16.7( 17.7)                                     :
            : M)                                                                           :
   20       :       25.6        17.2        18.3        28.6                               :
            : T)               17.3( 20.3)                                                 :
            : M)                                                                           :
   25       :                   20.4        22.3                                           :
            : T)                                                                           :
            : M)                                                                           :
            ---------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  44.2( 25.0)  31.1( 29.6)  26.3( 27.1)  29.9( 20.4)  45.1( 13.2) 124.0(  4.9)
```

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TABLE 27

DIFFUSER PLUME DILUTION

PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.05

```
                              DENSIMETRIC FROUDE NUMBER

                     1           3          10          30         100         1000
RISE(DIA)   ------------------------------------------------------------------------------
            : T)                                                                         :
            : M)                            5.7[  0.9]  5.6[  0.1]  5.6[  0.0]  5.6[  0.0] :
     1      :         1.9         2.8         5.8         9.9        17.6        61.8      :
            : T)                                                                         :
            : M)                                                                         :
     2      :         2.7         3.6         7.1        11.8        21.3        76.6      :
            : T)                                                                         :
            : M)                                                                         :
     3      :         3.6         4.4         8.0        13.1        23.7        87.4      :
            : T)                                                                         :
            : M)                                                                         :
     4      :         4.6         5.1         8.7        14.1        25.8        96.3      :
            : T)                                                                         :
            : M)                                                                         :
     5      :         5.7         6.0         9.3        15.1        27.7       104.0      :
            : T)                                                            112.0(  6.1) :
            : M)                                                                         :
     7      :         8.1         7.6        10.6        16.8        30.7       119.0      :
            : T)                                                                         :
            : M)                                                                         :
     9      :        10.9         9.4        11.6        18.2        33.3       137.0      :
            : T)                                                                         :
            : M)              9.5[  9.1]                                                 :
    12      :        15.5        11.8        13.3        20.4        36.7                  :
            : T)                                                                         :
            : M)  19.4( 14.3]                                                            :
    15      :        20.7        14.0        14.8        22.5        40.2                  :
            : T)                                                41.6( 16.4)              :
            : M)                                                                         :
    20      :        27.5        17.5        17.4        25.8        45.8                  :
            : T)                                    29.2( 25.0)                          :
            : M)                                                                         :
    25      :        33.6        21.0        20.0        29.4        52.6                  :
            : T)  36.2( 27.5)             24.1( 32.7)                                    :
            : M)                                                                         :
    33      :        41.8        26.0        24.2        35.5                              :
            : T)              26.5( 33.9)                                                :
            : M)                                                                         :
    42      :                    31.8        30.5                                          :
            : T)                                                                         :
            : M)                                                                         :
            ------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  74.4( 39.0)  52.7( 48.9)  42.0( 48.7)  42.4( 38.7)  57.2( 26.4) 154.0(  9.8)
```

TABLE 28

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.05

```
                                  DENSIMETRIC FROUDE NUMBER

                    1            3            10            30           100          1000
RISE(DIA)  ---------------------------------------------------------------------------------------
           : T)                                                                               :
           : M)                           5.7(  0.9)   5.6(  0.1)   5.6(  0.0)   5.6(  0.0)   :
    1      :       1.9          2.8          5.8          9.9         17.6         61.8       :
           : T)                                                                               :
           : M)                                                                               :
    2      :       2.7          3.6          7.1         11.8         21.1         76.0       :
           : T)                                                                               :
           : M)                                                                               :
    3      :       3.6          4.4          8.0         13.1         23.6         86.1       :
           : T)                                                                               :
           : M)                                                                               :
    4      :       4.6          5.1          8.7         14.1         25.6         93.6       :
           : T)                                                                               :
           : M)                                                                               :
    5      :       5.7          6.0          9.3         15.0         27.5        101.0       :
           : T)                                                                               :
           : M)                                                                               :
    7      :       8.1          7.6         10.5         16.7         30.3        112.0       :
           : T)                                                                               :
           : M)                                                                               :
    9      :      10.9          9.4         11.6         18.1         32.7        123.0       :
           : T)                                                                               :
           : M)                9.6(  9.3)                                                     :
   12      :      15.6         11.9         13.2         20.2         36.0        136.0       :
           : T)                                                                               :
           : M)  20.1( 14.6)                                                                  :
   15      :      21.0         14.1         14.7         22.2         39.1        147.0       :
           : T)                                                                156.0( 17.5)   :
           : M)                                                                               :
   20      :      28.4         17.8         17.1         25.3         43.7        166.0       :
           : T)                                                                               :
           : M)                                                                               :
   25      :      35.2         21.3         19.6         28.2         48.1        187.0       :
           : T)                                                                               :
           : M)                                                                               :
   33      :      45.9         26.9         23.4         32.9         54.5                    :
           : T)                                                                               :
           : M)                                                                               :
   42      :      56.8         33.1         27.8         38.3         62.0                    :
           : T)                                                     64.3( 44.9)               :
           : M)                                                                               :
   54      :      70.7         41.0         33.6         45.5         72.1                    :
           : T)  71.0( 54.5)                           51.6( 63.4)                            :
           : M)                                                                               :
   70      :      85.6         51.0         41.6         56.3         88.2                    :
           : T)               51.6( 71.1)  45.2( 77.2)                                        :
           : M)                                                                               :
   90      :                   63.2         53.1         74.4                                 :
           : T)                                                                               :
           : M)                                                                               :
           ---------------------------------------------------------------------------------------

DIL AT MAX REAL
ON PERMITTED RISE 100.0( 77.9) 116.0(102.0)  89.7(118.0)  79.4( 93.6)  90.3( 70.6) 216.0( 28.2)
```

TABLE 29

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.05

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	T)						
	M)			5.7[0.9]	5.6[0.1]	5.6[0.0]	5.6[0.0]
1		1.9	2.8	5.8	9.9	17.6	61.8
	T)						
	M)						
2		2.7	3.6	7.1	11.8	21.1	75.5
	T)						
	M)						
3		3.6	4.4	8.0	13.1	23.6	85.6
	T)						
	M)						
4		4.6	5.1	8.7	14.1	25.6	93.6
	T)						
	M)						
5		5.7	6.0	9.3	15.0	27.3	100.0
	T)						
	M)						
7		8.1	7.6	10.5	16.7	30.3	111.0
	T)						
	M)						
9		10.9	9.4	11.6	18.1	32.7	120.0
	T)						
	M)		9.7[9.3]				
12		15.7	11.9	13.2	20.1	35.7	132.0
	T)						
	M)	20.4[14.7]					
15		21.0	14.1	14.7	22.0	38.8	142.0
	T)						
	M)						
20		28.6	17.9	17.1	25.1	43.1	157.0
	T)						
	M)						
25		35.7	21.4	19.6	27.8	47.5	169.0
	T)						
	M)						
33		46.8	27.1	23.4	32.4	53.8	187.0
	T)						
	M)						
42		58.8	33.6	27.7	37.2	60.5	204.0
	T)						
	M)						
54		75.0	41.9	33.1	43.7	69.4	226.0
	T)						233.0(58.3)
	M)						
70		95.6	53.0	40.8	52.3	80.7	254.0
	T)						
	M)						
90		120.0	66.5	49.8	62.9	94.9	
	T)						
	M)						
115		150.0	83.4	61.6	76.9	113.0	
	T)	156.0(121.0)				124.0(130.0)	
	M)						
148		182.0	101.0	77.3	97.0	137.0	
	T)		114.0(165.0)	98.0(190.0)	109.0(166.0)		
	M)						
190			129.0	98.3	127.0	169.0	
	T)						
	M)						
244				140.0			
	T)						
	M)						
DIL AT MAX PEAK OR PERMITTED RISE		209.0(173.0)	262.0(235.0)	214.0(265.0)	177.0(237.0)	175.0(196.0)	276.0(81.1)

TABLE 30

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.05

```
                                        DENSIMETRIC FROUDE NUMBER

                        1            3            10           30           100          1000
RISE(DIA)  -------------------------------------------------------------------------------------
           : M]                                5.7[  0.9]   5.6[  0.1]   5.6[  0.0]   5.6[  0.0]  :
    1      :          1.9          2.8          5.8          9.9         17.6         61.8        :
           : M]                                                                                  :
    2      :          2.7          3.6          7.1         11.8         21.1         75.5        :
           : M]                                                                                  :
    3      :          3.6          4.4          8.0         13.1         23.6         85.6        :
           : M]                                                                                  :
    4      :          4.6          5.1          8.7         14.1         25.6         93.0        :
           : M]                                                                                  :
    5      :          5.7          6.0          9.3         15.0         27.3         99.6        :
           : M]                                                                                  :
    7      :          8.1          7.6         10.5         16.7         30.3        111.0        :
           : M]                                                                                  :
    9      :         10.9          9.4         11.6         18.1         32.7        120.0        :
           : M]                     9.7[  9.3]                                                   :
   12      :         15.7         11.9         13.2         20.1         35.7        131.0        :
           : M]    20.4[ 14.7]                                                                   :
   15      :         21.0         14.1         14.6         22.0         38.8        141.0        :
           : M]                                                                                  :
   20      :         28.6         17.9         17.1         25.1         43.1        155.0        :
           : M]                                                                                  :
   25      :         35.7         21.4         19.6         27.8         47.1        166.0        :
           : M]                                                                                  :
   33      :         47.1         27.3         23.3         32.2         53.4        183.0        :
           : M]                                                                                  :
   42      :         59.3         33.6         27.5         37.0         60.1        198.0        :
           : M]                                                                                  :
   54      :         76.0         42.2         33.1         43.4         69.0        216.0        :
           : M]                                                                                  :
   70      :         98.3         53.4         40.5         51.2         80.2        237.0        :
           : M]                                                                                  :
   90      :        125.0         67.6         49.8         61.5         93.7        260.0        :
           : M]                                                                                  :
  115      :        160.0         85.5         61.5         73.6        110.0                     :
           : M]                                                                                  :
  143      :        204.0        109.0         76.6         90.0        132.0                     :
           : M]                                                                                  :
  190      :        262.0        138.0         95.7        110.0        159.0                     :
           : M]                                                                                  :
  244      :                     176.0        120.0        136.0        194.0                     :
           : M]                                                                                  :
           -------------------------------------------------------------------------------------

OIL AT MAX REAL
OR PERMITTED RISE 325.0(237.0) 216.0(300.0) 146.0(301.0) 163.0(300.0) 229.0(300.0) 286.0(114.0)
```

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TABLE 31

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.02

		DENSIMETRIC FROUDE NUMBER					
RISE(DIA)		1	3	10	30	100	1000
	T)						
	M]			5.3[0.9]	5.3[0.1]	5.3[0.0]	5.3[0.0]
1		1.9	2.7	5.5	8.9	14.7	44.6
	T)						
	M]						
2		2.7	3.6	6.6	10.3	17.3	54.2
	T)						
	M]						
3		3.6	4.3	7.3	11.2	19.0	60.9
	T)						67.1(4.0)
	M]						
4		4.6	5.1	7.9	12.0	20.5	67.6
	T)						
	M]						
5		5.7	5.9	8.4	12.7	21.7	73.5
	T)						
	M]						
7		8.1	7.5	9.3	13.8	23.9	
	T)						
	M]		9.1[8.9]				
9		10.8	9.2	10.1	14.8	25.8	
	T)					26.5(10.0)	
	M]						
12		15.2	11.3	11.2	16.1	28.4	
	T)				17.4(15.2)		
	M]	18.0[13.7]					
15		19.8	13.3	12.2		31.8	
	T)	23.1(17.8)		13.8(20.1)			
	M]						
20		25.3	16.1		19.6		
	T)		16.5(20.8)				
	M]						
25		29.5	18.6	15.5			
	T)						
	M]						
DIL AT MAX REAL OR PERMITTED RISE		35.8(25.1)	24.2(30.9)	19.4(32.1)	23.0(24.8)	34.9(16.2)	90.3(6.5)

TABLE 32

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.02

```
                                 DENSIMETRIC FROUDE NUMBER

                    1          3          10          30          100         1000
RISE(DIA)  ---------------------------------------------------------------------------
           : T)                                                                     :
           : M)                       5.3(  0.9)  5.3(  0.1)  5.3(  0.0)  5.3(  0.0)  :
    1      :       1.9        2.7        5.5          8.8         14.7        44.3    :
           : T)                                                                     :
           : M)                                                                     :
    2      :       2.7        3.6        6.6         10.3         17.3        53.4    :
           : T)                                                                     :
           : M)                                                                     :
    3      :       3.6        4.3        7.3         11.2         19.0        59.7    :
           : T)                                                                     :
           : M)                                                                     :
    4      :       4.6        5.1        7.8         12.0         20.4        65.3    :
           : T)                                                                     :
           : M)                                                                     :
    5      :       5.7        5.9        8.4         12.6         21.5        69.5    :
           : T)                                                                     :
           : M)                                                                     :
    7      :       8.1        7.5        9.2         13.7         23.4        77.6    :
           : T)                                                           82.1(  8.2) :
           : M)                                                                     :
    9      :      10.9        9.2       10.0         14.6         25.1        85.5    :
           : T)                                                                     :
           : M)             9.3(  9.2)                                              :
   12      :      15.5       11.5       11.1         15.8         27.3        97.9    :
           : T)                                                                     :
           : M)  19.4( 14.3)                                                        :
   15      :      20.5       13.6       12.1         16.9         29.0                :
           : T)                                                                     :
           : M)                                                                     :
   20      :      27.3       16.7       13.7         18.5         32.0                :
           : T)                                              32.2( 20.6)            :
           : M)                                                                     :
   25      :      33.1       19.7       15.4         20.0         34.8                :
           : T)  35.7( 27.6)                     21.7( 31.0)                        :
           : M)                                                                     :
   33      :      40.9       24.3       17.8         22.5         41.0                :
           : T)             25.1( 34.9) 19.3( 38.4)                                 :
           : M)                                                                     :
   42      :                 28.6       20.4         25.4                             :
           : T)                                                                     :
           : M)                                                                     :
   54      :                            24.3                                        :
           : T)                                                                     :
           : M)                                                                     :
           ---------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  60.6( 39.4)  40.2( 51.4)  29.2( 59.5)  30.0( 50.0)  42.7( 33.6) 111.0( 13.3)
```

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TABLE 33

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATION = 0.02

```
                                         DENSIMETRIC FROUDE NUMBER

                          1            3            10            30            100           1000
RISE(DIA)     ----------------------------------------------------------------------------------------
              : T)                                                                                    :
              : M)                                5.3(  0.9)   5.3(  0.1)   5.3(  0.0)   5.3(  0.0)   :
    1         :           1.9          2.7        5.5          8.8          14.7         44.3         :
              : T)                                                                                    :
              : M)                                                                                    :
    2         :           2.7          3.6        6.6          10.3         17.3         53.0         :
              : T)                                                                                    :
              : M)                                                                                    :
    3         :           3.6          4.3        7.3          11.2         18.9         59.3         :
              : T)                                                                                    :
              : M)                                                                                    :
    4         :           4.6          5.1        7.8          12.0         20.2         64.4         :
              : T)                                                                                    :
              : M)                                                                                    :
    5         :           5.7          5.9        8.4          12.6         21.4         68.5         :
              : T)                                                                                    :
              : M)                                                                                    :
    7         :           8.1          7.5        9.2          13.6         23.3         75.5         :
              : T)                                                                                    :
              : M)                                                                                    :
    9         :           10.9         9.2        10.0         14.5         24.7         80.9         :
              : T)                                                                                    :
              : M)                     9.5(  9.3)                                                     :
   12         :           15.6         11.6       11.1         15.7         [illegible]  88.3         :
              : T)                                                                                    :
              : M)   20.1( 14.6)                                                                      :
   15         :           20.8         13.6       12.1         16.7         28.4         95.2         :
              : T)                                                                                    :
              : M)                                                                                    :
   20         :           28.2         17.0       13.7         18.1         30.9         105.0        :
              : T)                                                                   112.0( 23.8)     :
              : M)                                                                                    :
   25         :           34.8         20.2       15.3         19.6         32.9         114.0        :
              : T)                                                                                    :
              : M)                                                                                    :
   33         :           44.9         25.4       17.9         21.5         35.8         129.0        :
              : T)                                                                                    :
              : M)                                                                                    :
   42         :           55.7         30.9       20.7         23.7         39.0                      :
              : T)                                                                                    :
              : M)                                                                                    :
   54         :           68.8         38.0       24.2         26.5         43.1                      :
              : T)   69.5( 54.9)                                          44.8( 59.7)                 :
              : M)                                                                                    :
   70         :           82.8         47.0       29.0         30.2         48.4                      :
              : T)                 48.9( 74.1)              33.8( 85.4)                               :
              : M)                                                                                    :
   90         :                        56.3       34.5         35.0         56.3                      :
              : T)                              35.3( 93.1)                                           :
              : M)                                                                                    :
  115         :                                   41.3         42.2                                   :
              : T)                                                                                    :
              : M)                                                                                    :
              ----------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 136.0( 79.1)  90.1(108.0)  61.5(139.0)  52.7(133.0)  61.9( 97.2) 152.0( 39.0)
```

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TABLE 34

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.02

```
                                    DENSIMETRIC FROUDE NUMBER

                      1             3            10            30           100          1000
RISE(DIA)   ---------------------------------------------------------------------------------------
            : T)                                                                                  :
            : M]                                5.3[  0.9]    5.3[  0.1]   5.3[  0.0]   5.3[  0.0] :
   1        :        1.9           2.7          5.5           8.8          14.7         44.3       :
            : T)                                                                                  :
            : M]                                                                                  :
   2        :        2.7           3.6          6.6          10.3          17.3         53.0       :
            : T)                                                                                  :
            : M]                                                                                  :
   3        :        3.6           4.3          7.3          11.2          18.9         59.3       :
            : T)                                                                                  :
            : M]                                                                                  :
   4        :        4.6           5.1          7.8          12.0          20.2         63.9       :
            : T)                                                                                  :
            : M]                                                                                  :
   5        :        5.7           5.9          8.4          12.6          21.4         68.1       :
            : T)                                                                                  :
            : M]                                                                                  :
   7        :        8.1           7.5          9.2          13.6          23.3         75.0       :
            : T)                                                                                  :
            : M]                                                                                  :
   9        :       10.9           9.2         10.0          14.5          24.7         80.4       :
            : T)                                                                                  :
            : M]                 9.5[  9.3]                                                       :
  12        :       15.6          11.6         11.1          15.7          26.7         87.2       :
            : T)                                                                                  :
            : M]  20.2[ 14.6]                                                                     :
  15        :       21.0          13.7         12.1          16.7          28.2         93.1       :
            : T)                                                                                  :
            : M]                                                                                  :
  20        :       28.4          17.1         13.7          18.1          30.7        102.0       :
            : T)                                                                                  :
            : M]                                                                                  :
  25        :       35.2          20.4         15.5          19.4          32.7        109.0       :
            : T)                                                                                  :
            : M]                                                                                  :
  33        :       45.9          25.6         18.0          21.4          35.4        119.0       :
            : T)                                                                                  :
            : M]                                                                                  :
  42        :       57.6          31.5         20.8          23.4          38.1        128.0       :
            : T)                                                                                  :
            : M]                                                                                  :
  54        :       73.5          39.4         24.6          26.2          41.6        140.0       :
            : T)                                                                                  :
            : M]                                                                                  :
  70        :       93.0          49.5         29.6          29.6          46.0        153.0       :
            : T)                                                                    163.0( 81.6)  :
            : M]                                                                                  :
  90        :      117.0          61.7         35.7          33.7          51.2        170.0       :
            : T)                                                                                  :
            : M]                                                                                  :
 115        :      145.0          77.0         43.3          39.0          57.5        192.0       :
            : T) 153.0(123.0)                                                                     :
            : M]                                                                                  :
 148        :      176.0          95.5         52.9          45.8          65.8                    :
            : T)               108.0(171.0)                                                       :
            : M]                                                                                  :
 190        :                    117.0         64.7          54.4          76.8                    :
            : T)                             76.0(232.0)                77.2(192.0)               :
            : M]                                                                                  :
 244        :                    139.0         79.2          65.7          92.8                    :
            : T)                                          66.2(247.0)                             :
            : M]                                                                                  :
            ---------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 194.0(176.0) 191.0(249.0)  93.7(300.0)  79.2(300.0) 115.0(296.0) 201.0(124.0)
```

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TABLE 35

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.02

		DENSIMETRIC FROUDE NUMBER					
RISE(DIA)		1	3	10	30	100	1000
	M]			5.3[0.9]	5.3[0.1]	5.3[0.0]	5.3[0.0]
1		1.9	2.7	5.5	8.8	14.7	44.3
	M]						
2		2.7	3.6	6.6	10.3	17.3	53.0
	M]						
3		3.6	4.3	7.3	11.2	18.9	59.3
	M]						
4		4.6	5.1	7.8	12.0	20.2	63.9
	M]						
5		5.7	5.9	8.4	12.6	21.4	68.1
	M]						
7		8.1	7.5	9.2	13.6	23.3	74.5
	M]						
9		10.9	9.2	10.0	14.5	24.7	79.8
	M]		9.5[9.4]				
12		15.7	11.6	11.1	15.7	26.7	86.6
	M]	20.4[14.7]					
15		21.0	13.7	12.1	16.7	28.2	92.6
	M]						
20		28.4	17.1	13.7	18.1	30.5	101.0
	M]						
25		35.5	20.5	15.5	19.4	32.4	108.0
	M]						
33		46.2	25.8	18.0	21.4	35.2	117.0
	M]						
42		58.4	31.8	20.8	23.4	37.9	126.0
	M]						
54		74.0	39.6	24.6	26.2	41.5	136.0
	M]						
70		95.6	50.2	29.6	29.4	45.5	148.0
	M]						
90		122.0	63.1	36.0	33.6	50.5	160.0
	M]						
115		154.0	79.2	43.7	38.7	56.3	173.0
	M]						
148		198.0	101.0	54.1	45.4	63.6	189.0
	M]						
190		253.0	128.0	67.3	53.9	72.5	207.0
	M]						
244			163.0	83.9	64.5	83.4	
	M]						
DIL AT MAX REAL OR PERMITTED RISE		321.0(242.0)	200.0(300.0)	101.0(300.0)	75.7(301.0)	94.6(300.0)	208.0(194.0)

TABLE 36

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.00

```
                                    DENSIMETRIC FROUDE NUMBER

                      1              3             10             30             100            1000
RISE(DIA)   -----------------------------------------------------------------------------------------------
            : T)                                                                                          :
            : M)                               5.1(  0.9)     5.0(  0.1)     5.0(  0.0)     5.0(  0.0)    :
     1      :      1.9            2.7            5.3            8.2           12.9           32.0         :
            : T)                                                                                          :
            : M)                                                                                          :
     2      :      2.7            3.5            6.2            9.3           14.8           37.0         :
            : T)                                                                                          :
            : M)                                                                                          :
     3      :      3.6            4.3            6.9           10.1           16.0           40.5         :
            : T)                                                                                          :
            : M)                                                                                          :
     4      :      4.6            5.0            7.4           10.7           17.0           43.1         :
            : T)                                                                                          :
            : M)                                                                                          :
     5      :      5.7            5.8            7.8           11.2           17.9           45.5         :
            : T)                                                                            46.5(  5.5)   :
            : M)                                                                                          :
     7      :      8.1            7.4            8.6           12.1           19.2           50.2         :
            : T)                                                                                          :
            : M)                 9.0(  8.9)                                                               :
     9      :     10.8            9.1            9.3           12.8           20.4           56.2         :
            : T)                                                             21.7( 11.8)                  :
            : M)                                                                                          :
    12      :     15.2           11.2           10.3           13.7           21.9                        :
            : T)                                                                                          :
            : M)  18.0( 13.7)                                                                             :
    15      :     19.8           13.0           11.1           14.6           23.4                        :
            : T)  23.1( 17.9)                                15.0( 16.9)                                  :
            : M)                                                                                          :
    20      :     25.1           15.7           12.5           15.9                                       :
            : T)                16.1( 21.1)    12.8( 21.6)                                                :
            : M)                                                                                          :
    25      :     28.3           17.9           13.6           17.2                                       :
            : T)                                                                                          :
            : M)                                                                                          :
    33      :                                   15.4                                                      :
            : T)                                                                                          :
            : M)                                                                                          :
            -----------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  28.3( 25.2)  19.8( 31.5)  16.0( 34.7)  18.8( 28.3)  27.0( 19.6)  58.0(  9.1)
```

TABLE 37

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.00

```
                                     DENSIMETRIC FROUDE NUMBER

                       1            3            10           30           100          1000
RISE(DIA)   ----------------------------------------------------------------------------------
            : T)                                                                               :
            : M]                             5.1[  0.9]   5.0[  0.1]   5.0[  0.0]   5.0[  0.0] :
    1       :         1.9          2.7          5.3          8.2         12.9         32.0     :
            : T)                                                                               :
            : M]                                                                               :
    2       :         2.7          3.5          6.2          9.3         14.7         36.7     :
            : T)                                                                               :
            : M]                                                                               :
    3       :         3.6          4.3          6.9         10.1         16.0         39.9     :
            : T)                                                                               :
            : M]                                                                               :
    4       :         4.6          5.0          7.4         10.7         16.9         42.5     :
            : T)                                                                               :
            : M]                                                                               :
    5       :         5.7          5.8          7.8         11.2         17.7         44.6     :
            : T)                                                                               :
            : M]                                                                               :
    7       :         8.1          7.4          8.6         12.0         19.0         47.8     :
            : T)                                                                               :
            : M]                                                                               :
    9       :        10.9          9.1          9.3         12.7         20.0         50.8     :
            : T)                                                                 53.9( 11.6)   :
            : M]                9.2[  9.1]                                                     :
   12       :        15.5         11.3         10.3         13.5         21.3         54.5     :
            : T)                                                                               :
            : M]   19.3[ 14.2]                                                                 :
   15       :        20.5         13.3         11.2         14.3         22.5         58.2     :
            : T)                                                                               :
            : M]                                                                               :
   20       :        27.1         16.3         12.6         15.5         24.0                  :
            : T)                                                    25.2( 24.7)                :
            : M]                                                                               :
   25       :        32.9         19.2         13.9         16.4         25.4                  :
            : T)   35.5( 27.7)                                                                 :
            : M]                                                                               :
   33       :        40.3         23.4         16.0         17.9         27.5                  :
            : T)                24.4( 35.3)  17.8( 40.9)  18.2( 35.3)                          :
            : M]                                                                               :
   42       :                     27.4         18.1         19.4                               :
            : T)                                                                               :
            : M]                                                                               :
   54       :                                  20.5         21.4                               :
            : T)                                                                               :
            : M]                                                                               :
            ----------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  43.8( 39.6)  30.3( 52.6)  22.2( 64.8)  22.8( 58.9)  31.6( 41.9)  67.5( 19.6)
```

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TABLE 38

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.00

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	T)						
	M)			5.1[0.9]	5.0[0.1]	5.0[0.0]	5.0[0.0]
1		1.9	2.7	5.3	8.2	12.9	32.0
	T)						
	M)						
2		2.7	3.5	6.2	9.3	14.7	36.7
	T)						
	M)						
3		3.6	4.3	6.9	10.1	16.0	39.6
	T)						
	M)						
4		4.6	5.0	7.4	10.7	16.9	42.2
	T)						
	M)						
5		5.7	5.8	7.8	11.2	17.6	44.0
	T)						
	M)						
7		8.1	7.4	8.6	12.0	18.9	47.1
	T)						
	M)						
9		10.9	9.1	9.3	12.6	19.8	49.8
	T)						
	M)		9.4[9.3]				
12		15.6	11.4	10.3	13.5	21.1	52.7
	T)						
	M)	20.1[14.6]					
15		20.8	13.5	11.2	14.2	22.2	55.4
	T)						
	M)						
20		28.0	16.7	12.6	15.3	23.4	58.7
	T)						
	M)						
25		34.5	19.8	14.0	16.3	24.7	61.8
	T)						
	M)						
33		44.6	24.6	16.2	17.8	26.3	66.1
	T)						67.7(36.4)
	M)						
42		54.9	29.8	18.8	19.2	27.7	70.5
	T)						
	M)						
54		67.8	36.7	21.9	21.0	29.5	76.5
	T)	68.5(55.1)					
	M)						
70		81.1	45.1	25.8	23.1	31.7	
	T)		47.5(75.6)			32.5(77.2)	
	M)						
90			53.7	30.6	25.7	34.0	
	T)			32.5(99.3)	27.0(101.0)		
	M)						
115				35.8	28.6	37.1	
	T)						
	M)						
148				40.4	31.9		
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		88.6(79.9)	59.2(111.0)	40.7(151.0)	33.8(165.0)	40.7(131.0)	85.0(62.3)

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TABLE 39

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.00

```
                                      DENSIMETRIC FROUDE NUMBER

                        1            3           10           30          100         1000
RISE(DIA)  -----------------------------------------------------------------------------------
           : T)                                                                             :
           : M]                                  5.1[  0.9]   5.0[  0.1]   5.0[  0.0]   5.0[  0.0]  :
    1      :            1.9          2.7          5.3          8.2         12.9         31.8      :
           : T)                                                                             :
           : M]                                                                             :
    2      :            2.7          3.5          6.2          9.3         14.7         36.5      :
           : T)                                                                             :
           : M]                                                                             :
    3      :            3.6          4.3          6.9         10.1         16.0         39.6      :
           : T)                                                                             :
           : M]                                                                             :
    4      :            4.6          5.0          7.4         10.7         16.9         41.9      :
           : T)                                                                             :
           : M]                                                                             :
    5      :            5.7          5.8          7.8         11.2         17.6         44.0      :
           : T)                                                                             :
           : M]                                                                             :
    7      :            8.1          7.4          8.6         12.0         18.9         47.1      :
           : T)                                                                             :
           : M]                                                                             :
    9      :           10.9          9.1          9.3         12.6         19.8         49.5      :
           : T)                                                                             :
           : M]                    9.4[  9.3]                                               :
   12      :           15.6         11.4         10.3         13.5         21.1         52.4      :
           : T)                                                                             :
           : M]   20.2[ 14.6]                                                               :
   15      :           21.0         13.5         11.7         14.2         22.0         54.8      :
           : T)                                                                             :
           : M]                                                                             :
   20      :           28.2         16.7         12.6         15.3         23.4         58.0      :
           : T)                                                                             :
           : M]                                                                             :
   25      :           35.0         20.0         14.1         16.2         24.5         60.7      :
           : T)                                                                             :
           : M]                                                                             :
   33      :           45.5         24.9         16.3         17.6         26.0         64.4      :
           : T)                                                                             :
           : M]                                                                             :
   42      :           56.8         30.5         18.9         19.2         27.4         67.7      :
           : T)                                                                             :
           : M]                                                                             :
   54      :           71.9         37.8         22.2         21.0         29.1         71.2      :
           : T)                                                                             :
           : M]                                                                             :
   70      :           91.8         47.5         26.5         23.3         31.0         75.3      :
           : T)                                                                             :
           : M]                                                                             :
   90      :          115.0         59.2         32.0         25.9         33.0         79.7      :
           : T)                                                                             :
           : M]                                                                             :
  115      :          142.0         73.4         38.6         29.3         35.3         84.5      :
           : T) 151.0(124.0)                                                       88.3(137.0)  :
           : M]                                                                             :
  148      :          172.0         91.2         47.1         33.5         37.9         90.1      :
           : T)                105.0(176.0)                                                     :
           : M]                                                                             :
  190      :                       111.0         57.5         38.7         41.1         97.1      :
           : T)                                                                             :
           : M]                                                                             :
  244      :                       129.0         69.6         45.1         44.8                   :
           : T)                             70.3(248.0)  51.1(300.0)  46.8(276.0)               :
           : M]                                                                             :
           -----------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 189.0(179.0) 131.0(257.0)  80.3(300.0)  51.2(301.0)  48.3(300.0) 107.0(234.0)
```

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TABLE 40

DIFFUSER PLUME DILUTION
PORT SPACING = 5 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.00

```
                                      DENSIMETRIC FROUDE NUMBER

                   1           3           10           30           100          1000
RISE(DIA)  ---------------------------------------------------------------------------------------
           : M]                       5.1[  0.9]   5.0[  0.1]   5.0[  0.0]   5.0[  0.0]   :
    1      :      1.9         2.7          5.3          8.2         12.9         31.8       :
           : M]                                                                           :
    2      :      2.7         3.5          6.2          9.3         14.7         36.5       :
           : M]                                                                           :
    3      :      3.6         4.3          6.9         10.1         16.0         39.6       :
           : M]                                                                           :
    4      :      4.6         5.0          7.4         10.7         16.9         41.9       :
           : M]                                                                           :
    5      :      5.7         5.8          7.8         11.2         17.6         44.0       :
           : M]                                                                           :
    7      :      8.1         7.4          8.6         12.0         18.9         46.8       :
           : M]                                                                           :
    9      :     10.9         9.1          9.3         12.6         19.8         49.5       :
           : M]            9.4[  9.3]                                                     :
   12      :     15.7        11.4         10.3         13.5         21.0         52.4       :
           : M]  20.4[ 14.7]                                                              :
   15      :     21.0        13.5         11.2         14.2         22.0         54.8       :
           : M]                                                                           :
   20      :     28.2        16.8         12.6         15.3         23.4         57.7       :
           : M]                                                                           :
   25      :     35.0        20.0         14.1         16.2         24.5         60.4       :
           : M]                                                                           :
   33      :     45.9        24.9         16.3         17.6         26.0         63.9       :
           : M]                                                                           :
   42      :     57.6        30.7         18.9         19.2         27.4         67.1       :
           : M]                                                                           :
   54      :     72.9        38.0         22.3         21.0         29.0         70.5       :
           : M]                                                                           :
   70      :     93.6        48.1         26.7         23.3         30.8         74.3       :
           : M]                                                                           :
   90      :    120.0        60.5         32.2         26.0         32.8         78.1       :
           : M]                                                                           :
  115      :    152.0        75.7         39.4         29.5         35.1         82.1       :
           : M]                                                                           :
  148      :    194.0        96.1         48.5         34.0         37.7         86.3       :
           : M]                                                                           :
  190      :    248.0       122.0         60.0         39.6         40.9         90.9       :
           : M]                                                                           :
  244      :    318.0       156.0         75.1         46.8         44.6         95.6       :
           : M]                                                                           :
           ---------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 318.0(245.0) 190.0(301.0)  90.6(301.0)  54.2(301.0)  48.3(300.0)  99.8(300.0)
```

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TABLE 41

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.10

```
                                      DENSIMETRIC FROUDE NUMBER

                            1            3           10           30          100         1000
RISE(DIA)    --------------------------------------------------------------------------------------
             : T)                                                                                 :
             : M)                                      15.9[  0.9]  15.9[  0.1]  15.9[  0.0]  :
      1      :        1.9          2.8          6.4         16.4         34.3        134.0        :
             : T)                                                                163.0(  1.7)  :
             : M)                                                                                 :
      2      :        2.7          3.7          8.8         21.4         42.8        177.0        :
             : T)                                                                                 :
             : M)                                                                                 :
      3      :        3.5          4.6         11.1         25.3         49.1                     :
             : T)                                                                                 :
             : M)                                                                                 :
      4      :        4.5          5.6         13.5         28.8         54.5                     :
             : T)                                                   58.4(  4.8)                :
             : M)                                                                                 :
      5      :        5.6          6.6         16.1         32.0         60.1                     :
             : T)                                                                                 :
             : M)                         16.6[  5.2]                                             :
      7      :        8.1          8.8         21.3         38.6         72.0                     :
             : T)                                      39.9(  7.5)                                :
             : M)                                                                                 :
      9      :       10.8         11.3         26.3         44.9                                  :
             : T)                         32.4( 11.3)                                             :
             : M)                                                                                 :
      12     :       15.4         15.8         34.8                                               :
             : T)                                                                                 :
             : M)                                                                                 :
      15     :       20.5         21.4         44.6                                               :
             : T)    25.5( 17.6)  26.0( 17.1)                                                     :
             : M)                 24.1[ 16.2]                                                     :
      20     :       30.7         34.1                                                            :
             : T)                                                                                 :
             : M)    35.0[ 21.7]                                                                  :
             --------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE    64.5( 23.5)  54.7( 22.6)  49.7( 16.1)  56.2( 11.6)  80.2(  7.6) 227.0(  2.7)
```

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TABLE 42

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.10

```
                                    DENSIMETRIC FROUDE NUMBER

                      1            3            10            30            100           1000
RISE(DIA)  -----------------------------------------------------------------------------------------
           : T)                                                                                   :
           : M]                                          15.9[  0.9]  15.9[  0.1]  15.9[  0.0]    :
    1      :         1.9          2.8          6.4          16.3          34.3         132.0        :
           : T)                                                                                   :
           : M]                                                                                   :
    2      :         2.7          3.7          8.8          21.4          42.2         168.0        :
           : T)                                                                                   :
           : M]                                                                                   :
    3      :         3.6          4.6         11.0          25.1          48.1         195.0        :
           : T)                                                                    205.0(  3.4)   :
           : M]                                                                                   :
    4      :         4.5          5.6         13.4          28.4          53.4         221.0        :
           : T)                                                                                   :
           : M]                                                                                   :
    5      :         5.6          6.6         16.0          31.8          58.0         254.0        :
           : T)                                                                                   :
           : M]                             16.7[  5.3]                                           :
    7      :         8.1          8.8         21.0          37.8          66.7                      :
           : T)                                                                                   :
           : M]                                                                                   :
    9      :        10.9         11.2         25.8          43.7          75.0                      :
           : T)                                                       76.0(  9.4)                 :
           : M]                                                                                   :
   12      :        15.6         15.6         32.9          52.7          87.3                      :
           : T)                                          57.6( 13.8)                              :
           : M]                                                                                   :
   15      :        21.0         20.7         40.5          61.4                                    :
           : T)                             50.2( 18.7)                                           :
           : M]                26.9[ 18.1]                                                        :
   20      :        31.1         30.9         54.2          77.7                                    :
           : T)                                                                                   :
           : M]                                                                                   :
   25      :        43.1         41.3         70.9                                                :
           : T)  45.6( 26.0)  43.4( 26.1)                                                         :
           : M]  48.2[ 27.0]                                                                      :
   33      :        65.3         70.5                                                             :
           : T)                                                                                   :
           : M]                                                                                   :
           -----------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 114.0( 34.4)  92.0( 34.4)  78.2( 26.5)  81.9( 20.8) 106.0( 14.8) 205.0(  5.4)
```

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TABLE 43

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.10

```
                                   DENSIMETRIC FROUDE NUMBER

                     1            3            10           30           100          1000
RISE(DIA) ------------------------------------------------------------------------------------
          : T)                                                                               :
          : M)                                       15.9(  0.9)  15.9(  0.1)  15.9(  0.0)   :
   1      :         1.9          2.8          6.4      16.3         34.3        131.0         :
          : T)                                                                               :
          : M)                                                                               :
   2      :         2.7          3.7          8.8      21.3         42.2        164.0         :
          : T)                                                                               :
          : M)                                                                               :
   3      :         3.6          4.6         11.0      25.1         47.8        189.0         :
          : T)                                                                               :
          : M)                                                                               :
   4      :         4.5          5.6         13.4      28.4         53.0        208.0         :
          : T)                                                                               :
          : M)                                                                               :
   5      :         5.6          6.6         15.9      31.5         57.2        224.0         :
          : T)                                                                               :
          : M)                             16.8(  5.4)                                       :
   7      :         8.1          8.7       20.8        37.5         65.3        254.0         :
          : T)                                                                               :
          : M)                                                                               :
   9      :        10.9         11.2         25.4      43.4         72.9        283.0         :
          : T)                                                             289.0(  9.5)      :
          : M)                                                                               :
  12      :        15.7         15.5         32.2      51.6         83.2        324.0         :
          : T)                                                                               :
          : M)                                                                               :
  15      :        21.1         20.4         39.1      60.1         93.6        381.0         :
          : T)                                                                               :
          : M)                28.6( 19.2)                                                    :
  20      :        31.5         30.3         50.2      73.5        110.0                      :
          : T)                                                    124.0( 24.5)                :
          : M)                                                                               :
  25      :        44.0         39.9         61.8      87.4        126.0                      :
          : T)                                       107.0( 32.1)                              :
          : M)   59.7( 30.7)                                                                 :
  33      :        66.2         54.9         81.5     109.0        152.0                      :
          : T)                             99.7( 39.8)                                       :
          : M)                                                                               :
  42      :        88.0         72.5        107.0     136.0                                   :
          : T)   97.9( 46.4)  87.4( 49.4)                                                    :
          : M)                                                                               :
  54      :       115.0         99.0        150.0                                             :
          : T)                                                                               :
          : M)                                                                               :
          ------------------------------------------------------------------------------------

DIL AT MAX RISE
OR PERMITTED RISE 241.0( 62.5) 192.0( 66.0) 156.0( 55.2) 153.0( 47.3) 174.0( 37.7) 404.0( 15.3)
```

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TABLE 44

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.10

RISE(DIA)		DENSIMETRIC FROUDE NUMBER 1	3	10	30	100	1000
	T)						
	M]				15.9[0.9]	15.9[0.1]	15.9[0.0]
1		1.9	2.8	6.4	16.3	34.0	131.0
	T)						
	M]						
2		2.7	3.7	8.8	21.3	42.2	163.0
	T)						
	M]						
3		3.6	4.6	11.0	25.1	47.8	186.0
	T)						
	M]						
4		4.5	5.6	13.4	28.4	52.7	205.0
	T)						
	M]						
5		5.6	6.6	15.9	31.5	57.2	221.0
	T)						
	M]			16.8[5.4]			
7		8.1	8.7	20.8	37.5	65.3	248.0
	T)						
	M]						
9		10.9	11.2	25.4	43.1	72.4	271.0
	T)						
	M]						
12		15.7	15.5	32.2	51.6	82.6	299.0
	T)						
	M]						
15		21.1	20.4	38.6	59.7	92.3	325.0
	T)						
	M]		29.0[19.5]				
20		31.8	30.3	49.5	72.9	108.0	363.0
	T)						
	M]						
25		44.0	39.9	60.1	86.1	124.0	398.0
	T)						439.0(31.5)
	M]	63.5[31.8]					
33		67.1	54.5	77.6	108.0	146.0	449.0
	T)						
	M]						
42		91.1	71.0	97.6	131.0	173.0	
	T)						
	M]						
54		121.0	93.0	124.0	163.0	207.0	
	T)					245.0(67.7)	
	M]						
70		158.0	122.0	167.0	204.0	252.0	
	T)				231.0(79.7)		
	M]						
90		204.0	159.0	216.0	259.0	309.0	
	T)	216.0(95.7)	194.0(107.0)	221.0(91.7)			
	M]						
115		260.0	213.0	299.0			
	T)						
	M]						
DIL AT MAX REAL OR PERMITTED RISE		310.0(128.0)	387.0(142.0)	331.0(123.0)	313.0(109.0)	320.0(93.8)	456.0(34.1)

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TABLE 45

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.10

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	M]				15.9[0.0]	15.9[0.1]	15.9[0.0]
1		1.9	2.8	6.4	16.3	34.0	131.0
	M]						
2		2.7	3.7	8.8	21.3	42.2	163.0
	M]						
3		3.6	4.6	11.0	25.1	47.8	186.0
	M]						
4		4.5	5.6	13.4	28.4	52.7	205.0
	M]						
5		5.6	6.6	15.9	31.5	57.2	220.0
	M]			16.8[5.4]			
7		8.1	8.7	20.8	37.5	64.8	246.0
	M]						
9		10.9	11.2	25.4	43.1	72.4	268.0
	M]						
12		15.7	15.3	32.0	51.6	82.6	296.0
	M]						
15		21.1	20.4	38.6	59.7	92.3	320.0
	M]		29.2[19.6]				
20		31.8	30.3	49.1	72.9	108.0	354.0
	M]						
25		44.3	39.9	60.1	86.1	123.0	383.0
	M]	64.8[32.2]					
33		67.6	54.5	76.6	107.0	146.0	425.0
	M]						
42		91.7	71.0	95.6	130.0	171.0	
	M]						
51		123.0	92.3	121.0	161.0	205.0	
	M]						
70		162.0	121.0	154.0	202.0	249.0	
	M]						
90		212.0	156.0	196.0	252.0	303.0	
	M]						
115		273.0	201.0	247.0	315.0	369.0	
	M]						
148		354.0	259.0	316.0	398.0		
	M]						
190			333.0				
	M]						
DIL AT MAX REAL OR PERMITTED RISE		397.0(166.0)	356.0(203.0)	376.0(177.0)	400.0(149.0)	400.0(127.0)	464.0(41.7)

TABLE .46

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.05

```
                                 DENSIMETRIC FROUDE NUMBER

                      1            3           10           30          100         1000
RISE(DIA)   ---------------------------------------------------------------------------------
            : T)                                                                            :
            : M]                                      12.6[  0.8]  12.6(  0.1]  12.6(  0.0] :
     1      :        1.9          2.8          5.9         13.6         26.2         94.9    :
            : T)                                                                            :
            : M]                                                                            :
     2      :        2.7          3.6          7.6         16.9         32.0        121.0    :
            : T)                                                               124.0(  2.2) :
            : M]                                                                            :
     3      :        3.6          4.4          9.1         19.2         36.0        145.0    :
            : T)                                                                            :
            : M]                                                                            :
     4      :        4.6          5.1         10.3         21.1         39.6                 :
            : T)                                                                            :
            : M]                                                                            :
     5      :        5.6          6.0         11.7         22.8         42.8                 :
            : T)                                                  45.5(  5.9)               :
            : M]                          14.0[  6.8]                                       :
     7      :        8.1          7.6         14.3         26.2         49.1                 :
            : T)                                                                            :
            : M]                                                                            :
     9      :       10.8          9.4         16.8         29.2         56.5                 :
            : T)                                       29.8(  9.4)                          :
            : M]                                                                            :
    12      :       15.4         12.3         20.3         34.3                              :
            : T)                          22.9( 14.3)                                       :
            : M]                                                                            :
    15      :       20.3         15.5         23.9                                           :
            : T)  24.9( 17.7)  20.5( 19.2)                                                  :
            : M]                                                                            :
    20      :       29.3         21.7         32.7                                           :
            : T)                                                                            :
            : M]  33.4( 22.4]  22.6[ 20.7]                                                  :
    25      :                    28.9                                                       :
            : T)                                                                            :
            : M]                                                                            :
            ---------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  54.2( 24.0)  41.6( 26.6)  36.6( 21.1)  41.6( 14.9]  62.0(  9.6) 172.0(  3.5)
```

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TABLE 47

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.05

```
                                 DENSIMETRIC FROUDE NUMBER

                     1           3          10          30         100        1000
RISE(DIA) --------------------------------------------------------------------------------
          : T)                                                                           :
          : M]                                      12.6[  0.8] 12.6[  0.1] 12.6[  0.0]  :
    1     :        1.9         2.8         5.9        13.5        26.2        94.3       :
          : T)                                                                           :
          : M]                                                                           :
    2     :        2.7         3.6         7.6        16.9        31.8       117.0       :
          : T)                                                                           :
          : M]                                                                           :
    3     :        3.6         4.4         9.0        19.0        35.7       134.0       :
          : T)                                                                           :
          : M]                                                                           :
    4     :        4.6         5.1        10.3        21.0        38.8       150.0       :
          : T)                                                             155.0(  4.4)  :
          : M]                                                                           :
    5     :        5.7         6.0        11.6        22.6        41.9       164.0       :
          : T)                                                                           :
          : M]                          14.2(  7.1)                                      :
    7     :        8.1         7.6                    25.6        46.8       205.0       :
          : T)                                                                           :
          : M]                                                                           :
    9     :       10.9         9.4        16.6        28.6        51.6                   :
          : T)                                                  57.6( 11.9)              :
          : M]                                                                           :
    12    :       15.5        12.3        19.7        32.9        58.0                   :
          : T)                                                                           :
          : M]                                                                           :
    15    :       20.8        15.6        22.9        37.0        64.8                   :
          : T)                                      41.3( 18.1)                          :
          : M]                                                                           :
    20    :       30.7        21.6        28.0        44.3                               :
          : T)                          33.8( 25.2)                                      :
          : M]              27.1[ 24.0]                                                  :
    25    :       41.3      28.4                      52.6                               :
          : T)  44.0( 26.2) 34.5( 30.1)                                                  :
          : M]  47.5[ 27.8]                                                              :
    33    :       56.5        38.0        46.2                                           :
          : T)                                                                           :
          : M]                                                                           :
          --------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  98.4( 35.3)  72.4( 41.4)  58.7( 36.4)  59.5( 27.9)  79.3( 19.1) 215.0(  7.1)
```

TABLE 48

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.05

```
                                DENSIMETRIC FROUDE NUMBER

                    1            3            10           30           100          1000
RISE(DIA)  ------------------------------------------------------------------------------------
           : T)                                                                               :
           : M]                                       12.7[  0.8]  12.6[  0.1]  12.6[  0.0]   :
    1      :       1.9          2.8          5.9          13.5         26.2         93.6      :
           : T)                                                                               :
           : M]                                                                               :
    2      :       2.7          3.6          7.6          16.8         31.5        115.0      :
           : T)                                                                               :
           : M]                                                                               :
    3      :       3.6          4.4          9.0          19.0         35.5        131.0      :
           : T)                                                                               :
           : M]                                                                               :
    4      :       4.6          5.1         10.3          20.8         38.6        144.0      :
           : T)                                                                               :
           : M]                                                                               :
    5      :       5.7          6.0         11.6          22.5         41.3        155.0      :
           : T)                                                                               :
           : M]                                                                               :
    7      :       8.1          7.6         14.1          25.4         46.2        174.0      :
           : T)                                                                               :
           : M]                          14.3[  7.2]                                          :
    9      :      10.9          9.4         16.4          28.2         50.2        191.0      :
           : T)                                                                               :
           : M]                                                                               :
   12      :      15.6         12.3         19.6          32.2         56.1        214.0      :
           : T)                                                                 217.0( 12.6)  :
           : M]                                                                               :
   15      :      31.0         15.6         22.5          36.0         61.8        236.0      :
           : T)                                                                               :
           : M]                                                                               :
   20      :      31.3         21.7         27.3          42.2         70.0        287.0      :
           : T)                                                                               :
           : M]                                                                               :
   25      :      43.1         28.6         32.0          48.5         78.7                   :
           : T)                                                    90.6( 32.4)                :
           : M]  60.1[ 31.6]  30.1[ 26.0]                                                     :
   33      :      64.0         39.4         39.6          58.4         92.0                   :
           : T)                                                                               :
           : M]                                                                               :
   42      :      82.7         50.2         48.5          70.5        107.0                   :
           : T)  92.4( 47.3)                           73.9( 44.7)                            :
           : M]                                                                               :
   54      :     104.0         64.0         60.9          88.3                                :
           : T)               68.7( 58.5)  64.0( 56.7)                                        :
           : M]                                                                               :
   70      :                   81.8         84.0                                              :
           : T)                                                                               :
           : M]                                                                               :
           ------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 213.0( 65.2) 157.0( 81.4) 173.0( 79.9) 111.0( 66.0) 127.0( 50.6) 302.0( 28.3)
```

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TABLE 49

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.05

```
                                           DENSIMETRIC FROUDE NUMBER

                          1               3              10              30             100            1000
RISE(DIA)        ------------------------------------------------------------------------------------------------
                 : T)                                                                                            :
                 : M]                                              12.7[  0.8]   12.6[  0.1]   12.6[  0.0]  :
    1            :        1.9             2.8             5.9            13.5            26.2            93.6      :
                 : T)                                                                                            :
                 : M]                                                                                            :
    2            :        2.7             3.6             7.6            16.8            31.5           115.0      :
                 : T)                                                                                            :
                 : M]                                                                                            :
    3            :        3.6             4.4             9.0            19.0            35.5           131.0      :
                 : T)                                                                                            :
                 : M]                                                                                            :
    4            :        4.6             5.1            10.3            20.8            38.6           143.0      :
                 : T)                                                                                            :
                 : M]                                                                                            :
    5            :        5.7             6.0            11.6            22.5            41.3           153.0      :
                 : T)                                                                                            :
                 : M]                                                                                            :
    7            :        8.1             7.6            14.0            25.4            45.9           171.0      :
                 : T)                                                                                            :
                 : M]                             14.3[  7.2]                                                     :
    9            :       10.9             9.4            16.3            28.2            50.2           185.0      :
                 : T)                                                                                            :
                 : M]                                                                                            :
   12            :       15.7            12.3            19.6            32.0            55.7           204.0      :
                 : T)                                                                                            :
                 : M]                                                                                            :
   15            :       21.0            15.6            22.5            35.7            60.9           220.0      :
                 : T)                                                                                            :
                 : M]                                                                                            :
   20            :       31.3            21.7            27.3            41.9            69.5           244.0      :
                 : T)                                                                                            :
                 : M]                                                                                            :
   25            :       43.4            28.8            31.8            47.8            77.1           265.0      :
                 : T)                                                                                            :
                 : M]  63.9[ 32.6]   30.9[ 26.5]                                                                 :
   33            :       65.3            39.6            39.1            56.8            89.1           295.0      :
                 : T)                                                                              326.0( 41.8)  :
                 : M]                                                                                            :
   42            :       87.4            50.9            47.5            67.6           103.0           326.0      :
                 : T)                                                                                            :
                 : M]                                                                                            :
   54            :      114.0            65.3            58.0            81.5           120.0                      :
                 : T)                                                                                            :
                 : M]                                                                                            :
   70            :      147.0            84.3            72.9           100.0           143.0                      :
                 : T)                                                                                            :
                 : M]                                                                                            :
   90            :      185.0           107.0            91.0           125.0           172.0                      :
                 : T) 201.0( 99.1)                                158.0(115.0) 175.0( 92.6)                    :
                 : M]                                                                                            :
  115            :      227.0           135.0           116.0                           208.0                      :
                 : T)                151.0(129.0) 140.0(138.0)                                                   :
                 : M]                                                                                            :
  148            :                      172.0           153.0           211.0                                      :
                 : T)                                                                                            :
                 : M]                                                                                            :
                 ------------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 259.0(136.0) 294.0(180.0) 284.0(189.0) 240.0(163.0) 239.0(135.0) 361.0( 51.8)
```

TABLE 50

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.05

		DENSIMETRIC FROUDE NUMBER					
RISE(DIA)		1	3	10	30	100	1000
	M]				12.7[0.8]	12.6[0.1]	12.6[0.0]
1		1.9	2.8	5.9	13.5	26.2	93.6
	M]						
2		2.7	3.6	7.6	16.8	31.5	115.0
	M]						
3		3.6	4.4	9.0	19.0	35.5	131.0
	M]						
4		4.6	5.1	10.3	20.8	38.6	143.0
	M]						
5		5.7	6.0	11.6	22.5	41.3	153.0
	M]						
7		8.1	7.6	14.0	25.4	45.9	170.0
	M]			14.3[7.3]			
9		10.9	9.4	16.3	28.2	50.2	184.0
	M]						
12		15.7	12.3	19.6	32.0	55.7	202.0
	M]						
15		21.1	15.6	22.5	35.7	60.9	218.0
	M]						
20		31.5	21.7	27.1	41.9	69.0	240.0
	M]						
25		43.4	28.8	31.8	47.5	77.1	259.0
	M]	64.8[32.8]	31.1[26.6]				
33		65.7	39.9	39.1	56.8	89.2	284.0
	M]						
42		88.0	51.2	47.1	66.7	102.0	310.0
	M]						
54		116.0	65.7	57.6	79.8	119.0	339.0
	M]						
70		152.0	85.6	71.9	97.2	141.0	
	M]						
90		196.0	109.0	89.4	119.0	168.0	
	M]						
115		251.0	140.0	111.0	146.0	201.0	
	M]						
148		324.0	179.0	141.0	181.0	245.0	
	M]						
190			229.0	177.0	226.0	300.0	
	M]						
244			294.0	224.0	283.0		
	M]						
DIL AT MAX REAL OR PERMITTED RISE		382.0(174.0)	310.0(250.0)	273.0(300.0)	295.0(256.0)	312.0(200.0)	370.0(67.5)

TABLE 51

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.02

```
                                     DENSIMETRIC FROUDE NUMBER

                        1            3           10          30          100         1000
 RISE(DIA)   ------------------------------------------------------------------------------------
             : T)                                                                               :
             : M)                                       11.1(  0.8)  11.0(  0.1) 11.0(  0.0)   :
     1       :       1.9          2.7          5.5         11.7         20.8        64.8        :
             : T)                                                                               :
             : M)                                                                               :
     2       :       2.7          3.6          7.1         14.1         24.6        79.8        :
             : T)                                                                90.4(  2.9)   :
             : M)                                                                               :
     3       :       3.6          4.3          8.2         15.7         27.1        91.7        :
             : T)                                                                               :
             : M)                                                                               :
     4       :       4.6          5.1          9.3         16.9         29.4       104.0        :
             : T)                                                                               :
             : M)                                                                               :
     5       :       5.7          5.9         10.2         17.9         31.3                    :
             : T)                                                                               :
             : M)                                                                               :
     7       :       8.1          7.5         12.0         19.7         34.8                    :
             : T)                                                    35.2(  7.4)               :
             : M)                           12.8(  8.0)                                         :
     9       :      10.8          9.2         13.6         21.3         38.0                    :
             : T)                                       22.9( 11.4)                            :
             : M)                                                                               :
    12       :      15.2         12.0         15.6         23.4         44.7                    :
             : T)                                                                               :
             : M)                                                                               :
    15       :      20.3         14.9         17.4         25.8                                 :
             : T) 24.8( 17.6)  19.7( 19.6)  18.3( 16.5)                                         :
             : M)                                                                               :
    20       :      29.0         20.1         20.4                                              :
             : T)                                                                               :
             : M) 32.9( 22.4)  22.0( 21.8)                                                      :
    25       :                   24.9         24.9                                              :
             : T)                                                                               :
             : M)                                                                               :
             ------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  44.1( 24.0)  32.0( 27.7)  26.1( 25.4)  30.7( 18.8)  46.7( 12.2) 123.0(  4.8)
```

TABLE 52

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.02

```
                                  DENSIMETRIC FROUDE NUMBER

                    1             3            10            30           100          1000
RISE(DIA) ------------------------------------------------------------------------------------------
          : T)                                                                                     :
          : M]                                            11.1[  0.8]   11.0[  0.1]   11.0[  0.0]  :
   1      :        1.9           2.7           5.5          11.7          20.8          64.4       :
          : T)                                                                                     :
          : M]                                                                                     :
   2      :        2.7           3.6           7.1          14.1          24.4          78.2       :
          : T)                                                                                     :
          : M]                                                                                     :
   3      :        3.6           4.3           8.2          15.7          26.9          88.6       :
          : T)                                                                                     :
          : M]                                                                                     :
   4      :        4.6           5.1           9.3          16.8          29.0          96.9       :
          : T)                                                                                     :
          : M]                                                                                     :
   5      :        5.7           5.9          10.2          17.7          30.7         105.0       :
          : T)                                                                       111.0(  6.0)  :
          : M]                                                                                     :
   7      :        8.1           7.5          11.9          19.4          33.8         118.0       :
          : T)                                                                                     :
          : M]                              13.2[  8.6]                                            :
   9      :       10.9           9.2          13.5          20.8          36.2         135.0       :
          : T)                                                                                     :
          : M]                                                                                     :
  12      :       15.5          12.0          15.6          22.8          39.6                     :
          : T)                                                                                     :
          : M]                                                                                     :
  15      :       20.7          15.1          17.4          24.4          42.8                     :
          : T)                                                          43.1( 15.4)                :
          : M]                                                                                     :
  20      :       30.5          20.7          20.1          27.3          48.0                     :
          : T)                                            29.0( 23.3)                              :
          : M]                26.9[ 25.2]                                                          :
  25      :       41.3                        22.8          30.1          56.2                     :
          : T)  43.7( 26.2)   32.7( 30.9)   25.5( 30.1)                                            :
          : M]  47.5[ 27.9]                                                                        :
  33      :       55.2          34.5          27.1          35.4                                   :
          : T)                                                                                     :
          : M]                                                                                     :
  42      :                     41.5          32.4                                                 :
          : T)                                                                                     :
          : M]                                                                                     :
          ------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  81.4( 35.6)   54.6( 43.6)   40.0( 46.1)   40.7( 37.5)   57.7( 25.1)  152.0(  9.8)
```

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TABLE 53

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.02

```
                                      DENSIMETRIC FROUDE NUMBER

                     1             3             10            30            100           1000
RISE(DIA)  ------------------------------------------------------------------------------------------
           : T)                                                                                    :
           : M)                                      11.1(  0.8)   11.0(  0.1)   11.0(  0.0)   :
    1      :        1.9           2.7           5.5          11.7          20.7          63.9       :
           : T)                                                                                    :
           : M)                                                                                    :
    2      :        2.7           3.6           7.1          14.1          24.4          77.6       :
           : T)                                                                                    :
           : M)                                                                                    :
    3      :        3.6           4.3           8.2          15.6          26.9          87.3       :
           : T)                                                                                    :
           : M)                                                                                    :
    4      :        4.6           5.1           9.3          16.8          28.8          94.9       :
           : T)                                                                                    :
           : M)                                                                                    :
    5      :        5.7           5.9          10.1          17.7          30.5         101.0       :
           : T)                                                                                    :
           : M)                                                                                    :
    7      :        8.1           7.5          11.9          19.3          33.3         112.0       :
           : T)                                                                                    :
           : M)                       13.4(  8.9)                                                  :
    9      :       10.9           9.2          13.5          20.7          35.7         121.0       :
           : T)                                                                                    :
           : M)                                                                                    :
   12      :       15.6          12.0          15.5          22.5          38.6         134.0       :
           : T)                                                                                    :
           : M)                                                                                    :
   15      :       21.0          15.1          17.3          24.1          41.3         144.0       :
           : T)                                                                     152.0( 17.4)   :
           : M)                                                                                    :
   20      :       31.1          21.0          20.2          26.5          45.2         162.0       :
           : T)                                                                                    :
           : M)                                                                                    :
   25      :       42.8          27.5          22.9          28.8          48.7         181.0       :
           : T)                                                                                    :
           : M)   59.7( 31.5)   29.8( 26.9)                                                        :
   33      :       63.5          37.0          27.3          32.4          53.9                     :
           : T)                                                                                    :
           : M)                                                                                    :
   42      :       82.1          46.2          31.8          36.5          60.1                     :
           : T)   90.8( 47.3)                                             61.5( 44.4)              :
           : M)                                                                                    :
   54      :      101.0          57.6          37.8          41.8          68.1                     :
           : T)                 63.4( 61.1)                 46.5( 64.1)                            :
           : M)                                                                                    :
   70      :                     70.4          45.6          49.7          81.7                     :
           : T)                               46.4( 71.7)                                          :
           : M)                                                                                    :
   90      :                                   55.5          62.6                                   :
           : T)                                                                                    :
           : M)                                                                                    :
           ------------------------------------------------------------------------------------------

DIL AT MAX HEAL
OR PERMITTED RISE 184.0( 66.0) 122.0( 87.2)  85.1(106.0)  73.5( 97.9)  85.3( 71.5) 209.0( 28.6)
```

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TABLE 54

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.02

		DENSIMETRIC FROUDE NUMBER					
RISE(DIA)		1	3	10	30	100	1000
	T)						
	M]				11.1[0.8]	11.0[0.1]	11.0[0.0]
1		1.9	2.7	5.5	11.7	20.7	63.9
	T)						
	M]						
2		2.7	3.6	7.1	14.1	24.4	77.6
	T)						
	M]						
3		3.6	4.3	8.2	15.6	26.9	86.7
	T)						
	M]						
4		4.6	5.1	9.3	16.8	28.8	94.3
	T)						
	M]						
5		5.7	5.9	10.1	17.7	30.5	100.0
	T)						
	M]						
7		8.1	7.5	11.9	19.3	33.3	111.0
	T)						
	M]			13.4[8.9]			
9		10.9	9.2	13.5	20.7	35.5	119.0
	T)						
	M]						
12		15.6	12.0	15.5	22.3	38.3	130.0
	T)						
	M]						
15		21.0	15.2	17.3	23.9	41.0	139.0
	T)						
	M]						
20		31.3	21.0	20.2	26.3	44.6	153.0
	T)						
	M]						
25		43.4	27.5	22.9	28.6	47.8	164.0
	T)						
	M]	63.5[32.5]	30.9[27.5]				
33		65.3	37.8	27.3	32.2	53.0	180.0
	T)						
	M]						
42		86.1	47.5	32.0	36.0	57.9	196.0
	T)						
	M]						
54		112.0	60.5	38.3	40.8	64.6	216.0
	T)						224.0(59.7)
	M]						
70		143.0	76.6	46.5	47.0	73.0	241.0
	T)						
	M]						
90		179.0	96.1	56.7	54.7	83.5	
	T)	196.0(100.0)					
	M]						
115		219.0	119.0	69.2	64.7	96.7	
	T)		137.0(136.0)			109.0(139.0)	
	M]						
148			147.0	85.3	77.6	115.0	
	T)			99.4(178.0)	91.9(182.0)		
	M]						
190			176.0	105.0	95.9	142.0	
	T)						
	M]						
244				135.0	133.0		
	T)						
	M]						
DIL AT MAX REAL OR PERMITTED RISE		245.0(138.0)	200.0(197.0)	214.0(259.0)	172.0(264.0)	160.0(212.0)	264.0(83.7)

TABLE 55

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.02

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	M]				11.1[0.8]	11.0[0.1]	11.0[0.0]
1		1.9	2.7	5.5	11.7	20.7	63.9
	M]						
2		2.7	3.6	7.1	14.1	24.4	77.6
	M]						
3		3.6	4.3	8.2	15.6	26.9	86.7
	M]						
4		4.6	5.1	9.3	16.7	28.8	94.3
	M]						
5		5.7	5.9	10.1	17.7	30.5	100.0
	M]						
7		8.1	7.5	11.9	19.3	33.1	111.0
	M]			13.5[9.1]			
9		10.9	9.2		20.5	35.5	119.0
	M]						
12		15.7	12.0	15.5	22.3	38.3	130.0
	M]						
15		21.0	15.2	17.3	23.9	40.8	138.0
	M]						
20		31.3	21.1	20.2	26.3	44.6	151.0
	M]						
25		43.4	27.7	22.9	28.6	47.8	162.0
	M]	64.8[32.9]	31.1[27.6]				
33		65.7	37.8	27.3	32.0	52.8	176.0
	M]						
42		87.3	47.8	32.2	35.7	57.7	190.0
	M]						
54		114.0	60.9	38.6	40.5	64.0	206.0
	M]						
70		148.0	78.2	46.8	46.8	72.0	225.0
	M]						
90		191.0	99.0	57.2	54.2	81.5	245.0
	M]						
115		244.0	125.0	70.3	63.7	93.1	268.0
	M]						
148		314.0	160.0	87.6	75.7	108.0	
	M]						
190			204.0	110.0	91.2	126.0	
	M]						
244			260.0	137.0	111.0	149.0	
	M]						
DIL AT MAX REAL OR PERMITTED RISE		375.0(178.0)	295.0(278.0)	166.0(301.0)	131.0(300.0)	173.0(300.0)	271.0(119.0)

TABLE 56

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.00

```
                                        DENSIMETRIC FROUDE NUMBER

                        1           3           10          30          100         1000
RISE(DIA)   ---------------------------------------------------------------------------------
            : T)                                                                            :
            : M)                                    10.1[  0.9] 10.1[  0.1] 10.1[  0.0]     :
    1       :          1.9         2.7         5.3         10.6        17.3        42.5     :
            : T)                                                                            :
            : M)                                                                            :
    2       :          2.7         3.5         6.7         12.5        19.8        49.1     :
            : T)                                                                            :
            : M)                                                                            :
    3       :          3.6         4.3         7.8         13.6        21.5        53.6     :
            : T)                                                                            :
            : M)                                                                            :
    4       :          4.6         5.0         8.7         14.4        22.8        57.6     :
            : T)                                                               58.4(  4.3)  :
            : M)                                                                            :
    5       :          5.7         5.8         9.6         15.2        23.9        60.9     :
            : T)                                                                            :
            : M)                                                                            :
    7       :          8.1         7.4         11.2        16.4        25.8        69.6     :
            : T)                                                   27.5(  9.2)              :
            : M)                            12.1[  8.3]                                     :
    9       :          10.8        9.1         12.6        17.4                             :
            : T)                                                                            :
            : M)                                                                            :
    12      :          15.2        11.8        14.3        18.8        29.8                 :
            : T)                                       19.3( 13.4)                          :
            : M)                                                                            :
    15      :          20.3        14.7        15.8        20.0        32.8                 :
            : T)  24.8( 17.7)  19.6( 19.8)  16.8( 17.5)                                     :
            : M)                                                                            :
    20      :          28.8        19.8        17.9        22.1                             :
            : T)                                                                            :
            : M)  32.9[ 22.5]  21.9[ 22.0]                                                  :
    25      :                      24.1        19.6                                         :
            : T)                                                                            :
            : M)                                                                            :
            ---------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  34.1( 24.1)  25.4( 28.1)  20.7( 27.6)  23.9( 22.2)  34.3( 15.4)  73.3(  7.3)
```

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TABLE 57

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.00

```
                                   DENSIMETRIC FROUDE NUMBER

                      1            3            10           30           100          1000
RISE(DIA)  ------------------------------------------------------------------------------------------
           : T)                                                                                      :
           : M]                                         10.1(  0.9)  10.1[  0.1]  10.1[  0.0]  :
    1      :         1.9          2.7          5.3          10.6         17.3         42.2         :
           : T)                                                                                      :
           : M]                                                                                      :
    2      :         2.7          3.5          6.7          12.5         19.7         48.5         :
           : T)                                                                                      :
           : M]                                                                                      :
    3      :         3.6          4.3          7.7          13.5         21.4         53.0         :
           : T)                                                                                      :
           : M]                                                                                      :
    4      :         4.6          5.0          8.7          14.4         22.6         56.1         :
           : T)                                                                                      :
           : M]                                                                                      :
    5      :         5.7          5.8          9.5          15.1         23.7         58.8         :
           : T)                                                                                      :
           : M]                                                                                      :
    7      :         8.1          7.4          11.2         16.2         25.4         63.5         :
           : T)                                                                     67.8(  9.2)  :
           : M]                           12.5[  8.8]                                                :
    9      :         10.9         9.1          12.6         17.3         26.7                      :
           : T)                                                                                      :
           : M]                                                                                      :
    12     :         15.5         11.9         14.4         18.5         28.4         73.6         :
           : T)                                                                                      :
           : M]                                                                                      :
    15     :         20.7         14.9         16.0         19.6         30.0         81.0         :
           : T)                                                      31.9( 19.4)                   :
           : M]                                                                                      :
    20     :         30.5         20.5         18.3         21.1         32.2                      :
           : T)                                                                                      :
           : M]                                                                                      :
    25     :         41.1         26.5         20.4         22.6         34.3                      :
           : T)  43.7( 26.2)  32.2( 31.2)  23.1( 32.1)  23.2( 27.6)                                :
           : M]  47.2[ 27.8]  26.7[ 25.3]                                                          :
    33     :         54.6         33.8         23.4         24.7         39.4                      :
           : T)                                                                                      :
           : M]                                                                                      :
    42     :                      38.9         26.3         27.0                                   :
           : T)                                                                                      :
           : M]                                                                                      :
           ------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  56.4( 35.6)  39.5( 44.2)  28.6( 50.7)  29.0( 46.3)  40.0( 33.1)  85.1( 15.6)
```

TABLE 58

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.00

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	T)						
	M)				10.1(0.9)	10.1(0.1)	10.1(0.0)
1		1.9	2.7	5.3	10.6	17.3	42.2
	T)						
	M)						
2		2.7	3.5	6.7	12.4	19.7	48.5
	T)						
	M)						
3		3.6	4.3	7.7	13.5	21.4	52.7
	T)						
	M)						
4		4.6	5.0	8.7	14.4	22.6	55.7
	T)						
	M)						
5		5.7	5.8	9.5	15.0	23.6	58.4
	T)						
	M)						
7		8.1	7.4	11.1	16.2	25.3	62.2
	T)						
	M)			12.6(9.1)			
9		10.9	9.1		17.1	26.5	65.5
	T)						
	M)						
12		15.6	12.0	14.4	18.4	28.0	70.0
	T)						
	M)						
15		21.0	15.0	16.1	19.4	29.4	73.3
	T)						
	M)						
20		31.1	20.8	18.5	21.0	31.2	78.0
	T)						
	M)						
25		42.8	27.1	20.8	22.3	32.9	82.3
	T)						85.2(28.7)
	M)	59.7(31.5)	29.8(27.1)				
33		63.5	36.5	24.4	24.4	35.0	88.5
	T)						
	M)						
42		81.5	45.2	28.2	26.5	37.1	95.7
	T)	90.4(47.6)					
	M)						
54		99.9	55.7	33.1	29.2	39.7	
	T)		61.4(61.6)			41.0(60.9)	
	M)						
70			67.4	39.2	32.5	42.7	
	T)			41.6(77.3)	34.2(80.0)		
	M)						
90				45.6	36.1	46.6	
	T)						
	M)						
115				51.3	40.1		
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		111.0(66.4)	76.0(89.3)	51.7(118.0)	42.8(130.0)	51.3(104.0)	107.0(49.5)

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TABLE 59

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.00

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	T)						
	M)				10.1[0.9]	10.1[0.1]	10.1[0.0]
1		1.9	2.7	5.3	10.6	17.3	42.2
	T)						
	M)						
2		2.7	3.5	6.7	12.4	19.7	48.5
	T)						
	M)						
3		3.6	4.3	7.7	13.5	21.3	52.3
	T)						
	M)						
4		4.6	5.0	8.7	14.4	22.5	55.7
	T)						
	M)						
5		5.7	5.8	9.5	15.0	23.6	58.0
	T)						
	M)						
7		8.1	7.4	11.1	16.2	25.1	62.2
	T)						
	M)						
9		10.9	9.1	12.6	17.1	26.5	65.1
	T)						
	M)			12.7[9.2]			
12		15.6	12.0	14.5	18.4	28.0	69.3
	T)						
	M)						
15		21.0	15.0	16.1	19.4	29.2	72.3
	T)						
	M)						
20		31.3	20.8	18.6	21.0	31.0	76.6
	T)						
	M)						
25		43.4	27.3	21.0	22.3	32.5	80.2
	T)						
	M)	63.5[32.5]	30.7[27.5]				
33		65.3	37.2	24.8	24.4	34.6	84.9
	T)						
	M)						
43		85.6	46.5	28.8	26.5	36.6	89.4
	T)						
	M)						
54		110.0	58.4	34.0	29.2	38.8	94.4
	T)						
	M)						
70		141.0	73.9	41.0	32.8	41.6	100.0
	T)						
	M)						
90		176.0	92.2	49.5	37.0	44.4	106.0
	T)	193.0(101.0)					111.0(109.0)
	M)						
115		214.0	114.0	59.8	42.1	47.6	113.0
	T)		133.0(140.0)				
	M)						
144			139.0	72.6	48.6	51.6	122.0
	T)						
	M)						
190			163.0	87.6	56.5	56.2	
	T)			88.9(194.0)	64.6(237.0)	59.0(218.0)	
	M)						
244				104.0	65.7	61.5	
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		239.0(140.0)	166.0(203.0)	112.0(290.0)	73.9(300.0)	66.6(300.0)	132.0(180.0)

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TABLE 60

DIFFUSER PLUME DILUTION
PORT SPACING = 10 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.00

	DENSIMETRIC FROUDE NUMBER					
RISE(DIA)	1	3	10	30	100	1000
M]				10.1[0.9]	10.1[0.1]	10.1[0.0]
1	1.9	2.7	5.3	10.6	17.3	42.2
M]						
2	2.7	3.5	6.7	12.4	19.7	48.5
M]						
3	3.6	4.3	7.7	13.5	21.3	52.3
M]						
4	4.6	5.0	8.7	14.4	22.5	55.7
M]						
5	5.7	5.8	9.5	15.0	23.6	58.0
M]						
7	8.1	7.4	11.1	16.2	25.1	62.2
M]						
9	10.9	9.1	12.6	17.1	26.3	65.1
M]			12.7[9.2]			
12	15.7	12.0	14.5	18.4	28.0	68.9
M]						
15	21.0	15.0	16.1	19.3	29.2	72.0
M]						
20	31.3	20.8	18.6	21.0	31.0	76.3
M]						
25	43.4	27.3	21.0	22.3	32.6	79.9
M]	64.8[32.9]	30.9[27.6]				
33	65.3	37.2	24.7	24.4	34.6	84.5
M]						
42	86.7	47.1	28.8	26.5	36.5	88.6
M]						
54	113.0	59.3	34.3	29.2	38.8	93.1
M]						
70	146.0	75.5	41.3	32.9	41.3	98.1
M]						
90	188.0	95.0	50.2	37.3	44.2	103.0
M]						
115	239.0	120.0	61.3	42.5	47.4	108.0
M]						
148	306.0	152.0	76.0	49.5	51.3	114.0
M]						
190		193.0	94.3	58.5	55.9	120.0
M]						
244		246.0	118.0	69.9	61.6	126.0
M]						
DIL AT MAX REAL OR PERMITTED RISE	371.0(180.0)	208.0(287.0)	143.0(301.0)	81.8(300.0)	67.2(300.0)	132.0(300.0)

TABLE 61

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.10

```
                                    DENSIMETRIC FROUDE NUMBER

                      1            3            10           30          100          1000
RISE(DIA)  ---------------------------------------------------------------------------------------
           : T)                                                                                  :
           : M]                                                                  71.0[  0.0]  :
    1      :         1.9          2.8          6.4         16.4         51.6       258.0        :
           : T)                                                                 261.0(  1.1)  :
           : M]                                                    71.0[  1.9]                 :
    2      :         2.7          3.7          8.8         23.3         72.9                    :
           : T)                                                                                  :
           : M]                                                                                  :
    3      :         3.5          4.6         11.1         29.4         88.6                    :
           : T)                                                    92.3(  3.3)                 :
           : M]                                                                                  :
    4      :         4.5          5.6         13.5         35.7        103.0                    :
           : T)                                                                                  :
           : M]                                                                                  :
    5      :         5.6          6.6         16.1         42.2        123.0                    :
           : T)                                       53.0(  6.5)                              :
           : M]                                                                                  :
    7      :         8.1          8.8         22.2         57.2                                 :
           : T)                                                                                  :
           : M]                                       71.5[  8.6]                              :
    9      :        10.8         11.3         29.6         75.5                                 :
           : T)                          38.0( 10.8)                                           :
           : M]                                                                                  :
   12      :        15.4         15.8         44.9                                              :
           : T)                                                                                  :
           : M]                                                                                  :
   15      :        20.5         21.4                                                           :
           : T)  25.5( 17.6)  26.2( 17.0)                                                       :
           : M]                                                                                  :
   20      :        30.7         37.3                                                           :
           : T)                                                                                  :
           : M]                                                                                  :
           ---------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  67.2( 23.4)  63.3( 22.2)  66.1( 14.7)  83.2(  9.4) 128.0(  5.1) 361.0(  1.7)
```

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TABLE 62

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.10

```
                                           DENSIMETRIC FROUDE NUMBER

                          1              3             10             30            100          1000
RISE(DIA)    -------------------------------------------------------------------------------------------------
             : T)                                                                                            :
             : M]                                                                             71.0[  0.0]    :
      1      :          1.9            2.8            6.4           16.4           51.2         249.0        :
             : T)                                                                                            :
             : M]                                                              71.0[  2.0]                   :
      2      :          2.7            3.7            8.8           23.1           71.9         319.0        :
             : T)                                                                            326.0(  2.1)    :
             : M]                                                                                            :
      3      :          3.6            4.6           11.0           29.0           86.1         390.0        :
             : T)                                                                                            :
             : M]                                                                                            :
      4      :          4.5            5.6           13.4           35.2           97.6                      :
             : T)                                                                                            :
             : M]                                                                                            :
      5      :          5.6            6.6           16.0           41.3          108.0                      :
             : T)                                                             121.0(  6.2)                   :
             : M]                                                                                            :
      7      :          8.1            8.8           21.7           54.9          130.0                      :
             : T)                                                                                            :
             : M]                                                                                            :
      9      :         10.9           11.2           28.6           70.0          153.0                      :
             : T)                                               85.0( 11.0)                                  :
             : M]                                               71.5[  9.2]                                  :
     12      :         15.6           15.6           41.6           93.0                                     :
             : T)                                                                                            :
             : M]                                                                                            :
     15      :         21.0           20.7           58.0          117.0                                     :
             : T)                                 69.5( 16.7)                                                :
             : M]                                 73.5[ 17.3]                                                :
     20      :         31.1           31.3           94.3                                                    :
             : T)                                                                                            :
             : M]                                                                                            :
     25      :         43.1           46.5                                                                   :
             : T)   45.6( 26.0)    48.8( 25.6)                                                               :
             : M]                  82.7[ 30.5]                                                               :
     33      :         72.5                                                                                  :
             : T)                                                                                            :
             : M]   90.5[ 33.7]                                                                              :
             -------------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 126.0( 34.0) 118.0( 32.3) 114.0( 22.1) 125.0( 15.7) 168.0(  9.6) 452.0(  3.4)
```

TABLE 63

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.10

```
                                  DENSIMETRIC FROUDE NUMBER

                    1            3           10           30          100         1000
RISE(DIA)  ------------------------------------------------------------------------------------
           : T)                                                                               :
           : M)                                                                 71.0[  0.0]   :
    1      :      1.9          2.8          6.4         16.4         50.9        245.0        :
           : T)                                                                               :
           : M)                                                    71.0[  2.0]                :
    2      :      2.7          3.7          8.8         22.9                     306.0        :
           : T)                                                                               :
           : M)                                                                               :
    3      :      3.6          4.6         11.0         29.0         85.0        352.0        :
           : T)                                                                               :
           : M)                                                                               :
    4      :      4.5          5.6         13.4         35.0         96.2        391.0        :
           : T)                                                                               :
           : M)                                                                               :
    5      :      5.6          6.6         15.9         41.0        106.0        425.0        :
           : T)                                                                458.0(  6.0)   :
           : M)                                                                               :
    7      :      8.1          8.7         21.5         54.2        124.0        492.0        :
           : T)                                                                               :
           : M)                                                                               :
    9      :     10.9         11.2         28.2         68.5        142.0        573.0        :
           : T)                                                                               :
           : M)                                       71.4[  9.4]                             :
   12      :     15.7         15.5         40.2         90.4        166.0                     :
           : T)                                                                               :
           : M)                                                                               :
   15      :     21.1         20.4         55.3        111.0        191.0                     :
           : T)                                                   197.0( 15.8)                :
           : M)                          75.5[ 18.4]                                          :
   20      :     31.5         30.5         86.2        146.0        232.0                     :
           : T)                                      166.0( 23.1)                             :
           : M)                                                                               :
   25      :     44.0         42.8        119.0        181.0                                  :
           : T)                         155.0( 30.5)                                          :
           : M)                                                                               :
   33      :     67.1         69.5        174.0                                               :
           : T)                                                                               :
           : M)             109.0[ 41.2]                                                      :
   42      :     98.3        114.0                                                            :
           : T) 112.0( 45.5) 129.0( 44.4)                                                     :
           : M)                                                                               :
   54      :    157.0        239.0                                                            :
           : T)                                                                               :
           : M) 159.0[ 54.4]                                                                  :
           ------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 312.0( 58.3) 270.0( 55.1) 236.0( 40.6) 238.0( 32.7) 275.0( 24.1) 617.0(  9.6)
```

TABLE 64

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.10

		DENSIMETRIC FROUDE NUMBER					
RISE(DIA)		1	3	10	30	100	1000
	T)						
	M)						71.0[0.0]
1		1.9	2.8	6.4	16.4	50.9	244.0
	T)						
	M)					71.0[2.0]	
2		2.7	3.7	8.8	22.9		304.0
	T)						
	M)						
3		3.6	4.6	11.0	29.0	84.4	347.0
	T)						
	M)						
4		4.5	5.6	13.4	35.0	95.6	380.0
	T)						
	M)						
5		5.6	6.6	15.9	41.0	105.0	411.0
	T)						
	M)						
7		8.1	8.7	21.5	54.1	124.0	461.0
	T)						
	M)						
9		10.9	11.2	28.0	68.1	141.0	505.0
	T)						
	M)				71.4[9.5]		
12		15.7	15.5	39.9	89.8	164.0	563.0
	T)						
	M)						
15		21.1	20.4	54.5	111.0	187.0	615.0
	T)						
	M)			76.0[18.7]			
20		31.8	30.3	84.4	144.0	225.0	
	T)						
	M)						
25		44.0	42.5	115.0	177.0	261.0	
	T)						
	M)						
33		67.6	67.1	164.0	230.0	317.0	
	T)						
	M)						
42		99.0	103.0	219.0	289.0	381.0	
	T)				364.0(53.2)	387.0(43.0)	
	M)		124.0[46.1]				
54		150.0	163.0	297.0	369.0		
	T)			355.0(62.6)			
	M)						
70		234.0	244.0	408.0			
	T)	309.0(83.7)	318.0(82.4)				
	M)	247.0[72.4]					
90		343.0	379.0				
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		447.0(103.0)	510.0(99.9)	462.0(77.1)	453.0(66.5)	461.0(53.4)	629.0(15.9)

TABLE 65

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.10

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	M]						71.0[0.0]
1		1.9	2.8	6.4	16.4	50.9	244.0
	M]					71.0[2.0]	
2		2.7	3.7	8.8	22.9		302.0
	M]						
3		3.6	4.6	11.0	28.8	84.4	345.0
	M]						
4		4.5	5.6	13.4	34.8	95.6	378.0
	M]						
5		5.6	6.6	15.9	41.0	105.0	407.0
	M]						
7		8.1	8.7	21.4	53.8	124.0	456.0
	M]						
9		10.9	11.2	28.0	68.1	140.0	497.0
	M]				71.4[9.5]		
12		15.7	15.3	39.9	89.8	164.0	550.0
	M]						
15		21.1	20.4	54.1	110.0	187.0	595.0
	M]			76.6[18.9]			
20		31.8	30.3	83.8	144.0	223.0	
	M]						
25		44.3	42.2	114.0	177.0	259.0	
	M]						
33		67.6	66.7	162.0	228.0	315.0	
	M]						
42		99.6	102.0	215.0	287.0	377.0	
	M]		129.0[47.7]				
54		151.0	160.0	284.0	364.0	458.0	
	M]						
70		234.0	232.0	378.0	468.0		
	M]	289.0[79.2]					
90		352.0	321.0	495.0			
	M]						
115		487.0	431.0				
	M]						
DIL AT MAX REAL OR PERMITTED RISE		535.0(124.0)	487.0(128.0)	528.0(95.9)	541.0(81.6)	536.0(65.9)	633.0(17.9)

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TABLE 66

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.05

```
                                  DENSIMETRIC FROUDE NUMBER

                      1            3           10           30          100         1000
 RISE(DIA)  ----------------------------------------------------------------------------------
          : T)                                                                              :
          : M]                                                                 44.9[  0.0]  :
     1    :          1.9          2.8          5.9         13.7         40.5   172.0        :
          : T)                                                                195.0(  1.4)  :
          : M]                                                   44.9[  1.3]                :
     2    :          2.7          3.6          7.6         18.6         54.5   232.0        :
          : T)                                                                              :
          : M]                                                                              :
     3    :          3.6          4.4          9.1         22.5         63.5                :
          : T)                                                   71.0(  4.0)                :
          : M]                                                                              :
     4    :          4.6          5.1         10.3         26.2         71.5                :
          : T)                                                                              :
          : M]                                                                              :
     5    :          5.6          6.0         11.7         29.8         78.7                :
          : T)                                                                              :
          : M]                                                                              :
     7    :          8.1          7.6         14.3         37.8                             :
          : T)                                      41.3(  7.8)                             :
          : M]                                      45.2[  8.7]                             :
     9    :         10.8          9.4         17.3         46.8                             :
          : T)                                                                              :
          : M]                                                                              :
    12    :         15.4         12.3         22.3                                          :
          : T)                         26.0( 13.8)                                          :
          : M]                                                                              :
    15    :         20.3         15.5         29.0                                          :
          : T)    24.9( 17.7)  20.5( 19.2)                                                  :
          : M]                              45.6[ 19.1]                                     :
    20    :         29.3         21.7                                                       :
          : T)                                                                              :
          : M]    49.2[ 23.9]                                                               :
    25    :                      30.9                                                       :
          : T)                                                                              :
          : M]                 45.6[ 26.4]                                                  :
            ----------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 56.1( 23.9)  46.2( 26.4)  48.5( 19.4)  62.6( 11.7)  97.2(  6.4) 269.0(  2.3)
```

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TABLE 67

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.05

```
                                      DENSIMETRIC FROUDE NUMBER

                          1              3             10             30            100           1000
RISE(DIA)     -----------------------------------------------------------------------------------------------
              : T)                                                                                          :
              : M]                                                                         44.9[  0.0]  :
      1       :          1.9            2.8            5.9           13.7           40.2          169.0         :
              : T)                                                                                          :
              : M]                                                          44.9[  1.3]                 :
      2       :          2.7            3.6            7.6           18.5           53.8          214.0         :
              : T)                                                                         242.0(  2.8)  :
              : M]                                                                                          :
      3       :          3.6            4.4            9.0           22.3           62.2          249.0         :
              : T)                                                                                          :
              : M]                                                                                          :
      4       :          4.6            5.1           10.3           25.8           69.0          289.0         :
              : T)                                                                                          :
              : M]                                                                                          :
      5       :          5.7            6.0           11.6           29.4           75.0                        :
              : T)                                                                                          :
              : M]                                                                                          :
      7       :          8.1            7.6           14.2           36.5           86.2                        :
              : T)                                                          90.4(  7.8)                 :
              : M]                                                                                          :
      9       :         10.9            9.4           16.9           44.3           96.9                        :
              : T)                                                                                          :
              : M]                                           45.5[  9.4]                                :
     12       :         15.5           12.3           21.4           55.7          116.0                        :
              : T)                                           62.6( 13.9)                                :
              : M]                                                                                          :
     15       :         20.8           15.6           26.5           67.1                                       :
              : T)                                                                                          :
              : M]                                                                                          :
     20       :         30.7           21.6           37.3           89.2                                       :
              : T)                            45.2( 22.8)                                               :
              : M]                            51.2[ 24.6]                                               :
     25       :         41.3           28.6           53.1                                                      :
              : T)  44.0( 26.2)    36.2( 29.9)                                                              :
              : M]                                                                                          :
     33       :         59.6           42.2                                                                     :
              : T)                                                                                          :
              : M]  71.2[ 34.9]    61.0[ 38.7]                                                              :
              -----------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 108.0( 35.1)  89.1( 39.9)  84.4( 30.7)  91.6( 20.2) 124.0( 12.4) 335.0(  4.5)
```

TABLE 68

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.05

```
                                      DENSIMETRIC FROUDE NUMBER

                        1            3           10           30          100         1000
  RISE(DIA)  -------------------------------------------------------------------------------------
             : T)                                                                                :
             : M]                                                                  44.9[  0.0)  :
      1      :         1.9          2.8          5.9         13.7         39.9        168.0      :
             : T)                                                                                :
             : M]                                                      44.9[  1.3]               :
      2      :         2.7          3.6          7.6         18.5         53.4        208.0      :
             : T)                                                                                :
             : M]                                                                                :
      3      :         3.6          4.4          9.0         22.2         61.3        237.0      :
             : T)                                                                                :
             : M]                                                                                :
      4      :         4.6          5.1         10.3         25.6         68.1        261.0      :
             : T)                                                                                :
             : M]                                                                                :
      5      :         5.7          6.0         11.6         29.0         74.0        282.0      :
             : T)                                                                                :
             : M]                                                                                :
      7      :         8.1          7.6         14.1         36.0         83.8        320.0      :
             : T)                                                                 339.0(  8.0)  :
             : M]                                                                                :
      9      :        10.9          9.4         16.7         43.4         93.6        357.0      :
             : T)                                                                                :
             : M]                                         45.9[  9.7]                            :
     12      :        15.6         12.3         21.0         54.2        107.0        420.0      :
             : T)                                                                                :
             : M]                                                                                :
     15      :        21.0         15.6         25.8         64.4        119.0                   :
             : T)                                                                                :
             : M]                                                                                :
     20      :        31.3         21.7         35.0         80.9        140.0                   :
             : T)                                                     143.0( 20.9)               :
             : M]                                                                                :
     25      :        43.1         28.6         45.9         97.6        160.0                   :
             : T)                                        118.0( 30.8)                            :
             : M]                            57.2[ 29.3]                                         :
     33      :        64.4         41.6         67.6        126.0                                 :
             : T)                                                                                :
             : M]                                                                                :
     42      :        91.1         58.9         93.6        161.0                                 :
             : T) 105.0( 46.4)              102.0( 44.5)                                         :
             : M]                                                                                :
     54      :       130.0         87.4        144.0                                              :
             : T)               88.6( 54.6)                                                      :
             : M] 143.0[ 57.7]  99.7[ 58.5]                                                      :
     70      :                    167.0                                                           :
             : T)                                                                                :
             : M]                                                                                :
             -------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 274.0( 61.2) 222.0( 71.0) 183.0( 59.0) 173.0( 44.3) 200.0( 32.4) 471.0( 13.0)
```

TABLE 69

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.05

```
                                      DENSIMETRIC FROUDE NUMBER

                        1            3           10           30          100         1000
RISE(DIA)   --------------------------------------------------------------------------------------
            : T)                                                                                 :
            : M]                                                                    44.9[  0.0]  :
     1      :         1.9          2.8          5.9         13.7         39.9        168.0       :
            : T)                                                                                 :
            : M]                                                       44.9[  1.3]               :
     2      :         2.7          3.6          7.6         18.5         53.4        206.0       :
            : T)                                                                                 :
            : M]                                                                                 :
     3      :         3.6          4.4          9.0         22.2         61.3        234.0       :
            : T)                                                                                 :
            : M]                                                                                 :
     4      :         4.6          5.1         10.3         25.6         67.6        258.0       :
            : T)                                                                                 :
            : M]                                                                                 :
     5      :         5.7          6.0         11.6         29.0         73.5        277.0       :
            : T)                                                                                 :
            : M]                                                                                 :
     7      :         8.1          7.6         14.0         36.0         83.2        309.0       :
            : T)                                                                                 :
            : M]                                                                                 :
     9      :        10.9          9.4         16.7         43.1         92.3        337.0       :
            : T)                                                                                 :
            : M]                                          45.9[  9.8]                            :
    12      :        15.7         12.3         21.0         53.8        105.0        372.0       :
            : T)                                                                                 :
            : M]                                                                                 :
    15      :        21.0         15.6         25.6         63.9        118.0        404.0       :
            : T)                                                                                 :
            : M]                                                                                 :
    20      :        31.3         21.7         34.5         79.8        137.0        451.0       :
            : T)                                                                                 :
            : M]                                                                                 :
    25      :        43.4         28.8         44.9         95.6        156.0        495.0       :
            : T)                                                                                 :
            : M]                             59.7[ 31.1]                                         :
    33      :        65.3         41.6         64.8        121.0        185.0                    :
            : T)                                                                                 :
            : M]                                                                                 :
    42      :        94.3         58.8         87.4        149.0        217.0                    :
            : T)                                                                                 :
            : M]                                                                                 :
    54      :       139.0         86.2        117.0        188.0        260.0                    :
            : T)                                                      277.0( 58.8)               :
            : M]              130.0[ 69.8]                                                       :
    70      :       205.0        131.0        157.0        241.0        318.0                    :
            : T) 279.0( 87.3)                            255.0( 74.2)                            :
            : M] 248.0[ 79.8]                                                                    :
    90      :       290.0        184.0        215.0        312.0                                 :
            : T)              223.0(105.0) 232.0( 95.2)                                          :
            : M]                                                                                 :
   115      :                    249.0        326.0                                              :
            : T)                                                                                 :
            : M]                                                                                 :
            --------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 361.0(111.0) 375.0(136.0) 368.0(123.0) 350.0( 99.6) 353.0( 79.7) 506.0( 26.4)
```

TABLE 70

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.05

		DENSIMETRIC FROUDE NUMBER					
RISE(DIA)		1	3	10	30	100	1000
	: M]						44.9[0.0]
1	:	1.9	2.8	5.9	13.7	39.9	168.0
	: M]					44.9[1.3]	
2	:	2.7	3.6	7.6	18.5	53.4	206.0
	: M]						
3	:	3.6	4.4	9.0	22.2	61.3	234.0
	: M]						
4	:	4.6	5.1	10.3	25.6	67.6	256.0
	: M]						
5	:	5.7	6.0	11.6	29.0	73.5	275.0
	: M]						
7	:	8.1	7.6	14.0	36.0	83.2	306.0
	: M]						
9	:	10.9	9.4	16.7	43.1	92.3	333.0
	: M]				45.9[9.8]		
12	:	15.7	12.3	21.0	53.8	105.0	366.0
	: M]						
15	:	21.1	15.6	25.4	63.5	117.0	396.0
	: M]						
20	:	31.5	21.7	34.3	79.8	136.0	436.0
	: M]						
25	:	43.4	28.8	44.6	94.9	155.0	472.0
	: M]			60.5[31.6]			
33	:	65.7	41.9	64.4	119.0	183.0	
	: M]						
42	:	94.9	59.3	86.1	147.0	215.0	
	: M]						
54	:	141.0	86.1	114.0	183.0	257.0	
	: M]						
70	:	212.0	131.0	151.0	231.0	310.0	
	: M]	299.0[87.0]	139.0[72.9]				
90	:	316.0	187.0	196.0	290.0	378.0	
	: M]						
115	:	429.0	252.0	251.0	365.0		
	: M]						
148	:		337.0	326.0			
	: M]						
DIL AT MAX REAL OR PERMITTED RISE		503.0(132.0)	408.0(176.0)	386.0(175.0)	422.0(135.0)	428.0(105.0)	512.0(31.4)

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TABLE 71

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.02

```
                                 DENSIMETRIC FROUDE NUMBER

                        1                 3                10                30               100              1000
RISE(DIA)  ----------------------------------------------------------------------------------------------------------------
           : T)                                                                                                            :
           : M)                                                                                            32.0[  0.0]     :
     1     :          1.9               2.7               5.5              11.9              30.5             111.0        :
           : T)                                                                                           138.0(  2.0)     :
           : M)                                                                          32.0[  1.1]                       :
     2     :          2.7               3.6               7.1              15.5              39.1             140.0        :
           : T)                                                                                                            :
           : M)                                                                                                            :
     3     :          3.6               4.3               8.2              18.2              44.3             171.0        :
           : T)                                                                                                            :
           : M)                                                                                                            :
     4     :          4.6               5.1               9.3              20.5              48.5                          :
           : T)                                                                                                            :
           : M)                                                                                                            :
     5     :          5.7               5.9              10.2              22.6              52.7                          :
           : T)                                                                          53.0(  5.2)                       :
           : M)                                                                                                            :
     7     :          8.1               7.5              12.0              26.5              60.5                          :
           : T)                                                                                                            :
           : M)                                                                                                            :
     9     :         10.8               9.2              13.7              30.5                                            :
           : T)                                                        31.5(  9.5)                                         :
           : M)                                                        32.9[ 10.2]                                         :
    12     :         15.2              12.0              16.2              36.7                                            :
           : T)                                                                                                            :
           : M)                                                                                                            :
    15     :         20.3              14.9              19.0                                                              :
           : T)      24.8( 17.6)       19.7( 19.6)       19.8( 16.0)                                                       :
           : M)                                                                                                            :
    20     :         29.0              20.1              24.4                                                              :
           : T)                                                                                                            :
           : M)      39.3[ 24.0]                         32.5[ 23.7]                                                       :
    25     :                           25.6                                                                                :
           : T)                                                                                                            :
           : M)                        33.4[ 27.5]                                                                         :
           ----------------------------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE    45.5( 24.0)       34.8( 27.6)       33.3( 23.8)       45.0( 14.7)       70.4(  8.3)      187.0(  3.2)
```

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TABLE 72

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.02

```
                                DENSIMETRIC FROUDE NUMBER

                       1          3          10          30          100         1000
RISE(DIA)  ---------------------------------------------------------------------------------
           : T)                                                                          !
           : M]                                                             32.0(  0.0]  !
    1      :          1.9        2.7         5.5        11.9        30.5     109.0       !
           : T)                                                                          !
           : M]                                                  32.0(  1.1]             !
    2      :          2.7        3.6         7.1        15.5        38.8     134.0       !
           : T)                                                                          !
           : M]                                                                          !
    3      :          3.6        4.3         8.2        18.1        43.7     153.0       !
           : T)                                                            169.0(  4.0)  !
           : M]                                                                          !
    4      :          4.6        5.1         9.3        20.4        47.5     170.0       !
           : T)                                                                          !
           : M]                                                                          !
    5      :          5.7        5.9        10.2        22.3        50.9     188.0       !
           : T)                                                                          !
           : M]                                                                          !
    7      :          8.1        7.5        11.9        25.8        56.5                 !
           : T)                                                                          !
           : M]                                                                          !
    9      :         10.9        9.2        13.5        29.2        61.8                 !
           : T)                                                  64.8( 10.4)             !
           : M]                                      33.6[ 11.6]                         !
   12      :         15.5       12.0        16.0        34.3        69.0                 !
           : T)                                                                          !
           : M]                                                                          !
   15      :         20.7       15.1        18.5        38.8        77.2                 !
           : T)                                      42.8( 17.9)                         !
           : M]                                                                          !
   20      :         30.5       20.7        22.9        46.2                             !
           : T)                                                                          !
           : M]                                                                          !
   25      :         41.3       26.9        27.9        54.8                             !
           : T)  43.7( 26.2)  34.1( 30.7)  30.9( 28.1)                                   !
           : M]                                                                          !
   33      :         58.4       37.3        37.0                                         !
           : T)                                                                          !
           : M]  64.1[ 35.1]  50.0[ 41.3]  40.8[ 35.5]                                   !
   42      :                    57.5                                                     !
           : T)                                                                          !
           : M]                                                                          !
           ---------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  90.0( 35.3)  66.5( 42 1)  56.3( 40.3)  61.8( 27.3)  87.3( 16.9) 231.0(  6.5)
```

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TABLE 73

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.02

```
                                      DENSIMETRIC FROUDE NUMBER

                            1            3           10           30          100         1000
RISE(DIA)    ----------------------------------------------------------------------------------
             : T)                                                                              :
             : M]                                                                32.0[  0.0]  :
      1      :            1.9          2.7          5.5         11.9         30.5        109.0  :
             : T)                                                                              :
             : M]                                                   32.0[  1.1]               :
      2      :            2.7          3.6          7.1         15.3         38.6        132.0  :
             : T)                                                                              :
             : M]                                                                              :
      3      :            3.6          4.3          8.2         18.0         43.4        149.0  :
             : T)                                                                              :
             : M]                                                                              :
      4      :            4.6          5.1          9.3         20.2         47.1        163.0  :
             : T)                                                                              :
             : M]                                                                              :
      5      :            5.7          5.9         10.1         22.2         50.2        175.0  :
             : T)                                                                              :
             : M]                                                                              :
      7      :            8.1          7.5         11.9         25.6         55.7        195.0  :
             : T)                                                                              :
             : M]                                                                              :
      9      :           10.9          9.2         13.5         28.8         60.1        213.0  :
             : T)                                                               233.0( 11.5)  :
             : M]                                                                              :
     12      :           15.6         12.0         15.9         33.3         65.7        238.0  :
             : T)                                                                              :
             : M]                                      34.0[ 12.5]                            :
     15      :           21.0         15.1         16.4         37.5         71.4        264.0  :
             : T)                                                                              :
             : M]                                                                              :
     20      :           31.1         21.0         22.6         43.7         80.0               :
             : T)                                                                              :
             : M]                                                                              :
     25      :           42.8         27.5         27.3         49.5         88.3               :
             : T)                                                   95.2( 29.4)               :
             : M]                                                                              :
     33      :           64.0         38.8         35.2         58.4        101.0               :
             : T)                                                                              :
             : M]                                                                              :
     42      :           90.4         53.4         45.5         69.0        118.0               :
             : T) 104.0( 46.4)                           72.2( 44.7)                            :
             : M]                          54.5[ 49.4]                                         :
     54      :          127.0         74.5         60.1         85.7                            :
             : T)              79.8( 57.0)  66.6( 59.7)                                         :
             : M] 139.0[ 58.1]  94.6[ 65.0]                                                    :
     70      :                       103.0         79.4                                         :
             : T)                                                                              :
             : M]                                                                              :
             ----------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 244.0( 61.6) 175.0( 76.7) 130.0( 82.7) 115.0( 66.3) 132.0( 46.8) 321.0( 18.8)
```

TABLE 74

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.02

```
                                   DENSIMETRIC FROUDE NUMBER

                       1           3           10          30          100         1000
RISE(DIA)   ------------------------------------------------------------------------------
            : T)                                                                         :
            : M)                                                           32.0(  0.0)   :
   1        :         1.9         2.7         5.5         11.9        30.5    108.0      :
            : T)                                                                         :
            : M)                                                  32.0(  1.1)            :
   2        :         2.7         3.6         7.1         15.3        38.6        132.0  :
            : T)                                                                         :
            : M)                                                                         :
   3        :         3.6         4.3         8.2         18.0        43.4        148.0  :
            : T)                                                                         :
            : M)                                                                         :
   4        :         4.6         5.1         9.3         20.2        47.1        162.0  :
            : T)                                                                         :
            : M)                                                                         :
   5        :         5.7         5.9        10.1         22.2        50.2        172.0  :
            : T)                                                                         :
            : M)                                                                         :
   7        :         8.1         7.5        11.9         25.4        55.3        191.0  :
            : T)                                                                         :
            : M)                                                                         :
   9        :        10.9         9.2        13.5         28.6        59.7        207.0  :
            : T)                                                                         :
            : M)                                                                         :
  12        :        15.6        12.0        15.9         33.1        65.3        226.0  :
            : T)                                                                         :
            : M)                                     34.0( 12.7)                         :
  15        :        21.0        15.2        18.4         37.2        70.5        244.0  :
            : T)                                                                         :
            : M)                                                                         :
  20        :        31.3        21.0        22.6         43.1        78.2        268.0  :
            : T)                                                                         :
            : M)                                                                         :
  25        :        43.4        27.5        27.1         48.5        85.7        291.0  :
            : T)                                                                         :
            : M)                                                                         :
  33        :        65.3        39.4        35.2         56.8        97.6        323.0  :
            : T)                                                               345.0( 39.1)  :
            : M)                                                                         :
  42        :        94.3        54.5        45.2         65.7       110.0        356.0  :
            : T)                                                                         :
            : M)                                                                         :
  54        :       138.0        77.6        60.1         77.4       126.0               :
            : T)                                                                         :
            : M)                         61.3( 55.1)                                     :
  70        :       204.0       112.0        79.3         93.2       148.0               :
            : T) 276.0( 87.3)                                    175.0( 89.1)            :
            : M) 246.0( 79.5) 131.0( 78.2)                                               :
  90        :       285.0       156.0       101.0        114.0       176.0               :
            : T)            194.0(112.0)                                                 :
            : M)                                                                         :
 115        :                   199.0       128.0        141.0       215.0               :
            : T)                        146.0(133.0) 147.0(120.0)                        :
            : M)                                                                         :
 148        :                   248.0       163.0        191.0                           :
            : T)                                                                         :
            : M)                                                                         :
            ------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 340.0(112.0) 259.0(152.0) 295.0(185.0) 258.0(170.0) 241.0(131.0) 374.0( 46.7)
```

TABLE 75

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.02

RISE(DIA)		DENSIMETRIC FROUDE NUMBER					
		1	3	10	30	100	1000
	M]						32.0[0.0]
1		1.9	2.7	5.5	11.9	30.5	108.0
	M]					32.0[1.1]	
2		2.7	3.6	7.1	15.3	38.6	131.0
	M]						
3		3.6	4.3	8.2	18.0	43.4	148.0
	M]						
4		4.6	5.1	9.3	20.2	47.1	161.0
	M]						
5		5.7	5.9	10.1	22.2	50.2	172.0
	M]						
7		8.1	7.5	11.9	25.4	55.3	190.0
	M]						
9		10.9	9.2	13.5	28.6	59.3	205.0
	M]						
12		15.7	12.0	15.9	33.1	65.3	225.0
	M]				34.3[12.9]		
15		21.0	15.2	18.2	37.2	70.0	241.0
	M]						
20		31.3	21.1	22.6	43.1	78.2	264.0
	M]						
25		43.4	27.7	27.1	48.5	85.3	283.0
	M]						
33		65.7	39.4	35.0	56.4	96.4	310.0
	M]						
42		94.9	54.9	45.2	65.3	109.0	336.0
	M]						
54		140.0	78.2	50.1	76.5	124.0	367.0
	M]			63.1[56.4]			
70		211.0	114.0	79.8	91.4	144.0	
	M]	297.0[86.9]	144.0[81.9]				
90		314.0	153.0	103.0	110.0	169.0	
	M]						
115		423.0	217.0	129.0	132.0	199.0	
	M]						
148			283.0	166.0	161.0	239.0	
	M]						
190			367.0	211.0	198.0	288.0	
	M]						
244				269.0	245.0		
	M]						
DIL AT MAX REAL OR PERMITTED RISE		496.0(133.0)	375.0(194.0)	298.0(272.0)	273.0(276.0)	295.0(196.0)	380.0(59.8)

TABLE 76

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.00

```
                                    DENSIMETRIC FROUDE NUMBER

                    1          3          10          30          100         1000
RISE(DIA)  ---------------------------------------------------------------------------------
           : T)                                                                           :
           : M)                                                               25.1(  0.0) :
    1      :       1.9        2.7         5.3        10.6        23.6         62.2        :
           : T)                                                                           :
           : M)                                                  25.3(  1.2)              :
    2      :       2.7        3.5         6.7        13.5        28.8         71.9        :
           : T)                                                                           :
           : M)                                                                           :
    3      :       3.6        4.3         7.8        15.5        31.5         79.3        :
           : T)                                                               79.8(  3.2) :
           : M)                                                                           :
    4      :       4.6        5.0         8.7        17.1        33.8         85.6        :
           : T)                                                                           :
           : M)                                                                           :
    5      :       5.7        5.8         9.6        18.6        35.5         93.5        :
           : T)                                                  38.3(  6.9)              :
           : M)                                                                           :
    7      :       8.1        7.4        11.2        21.3        38.6                     :
           : T)                                                                           :
           : M)                                                                           :
    9      :      10.8        9.1        12.7        23.7        41.5                     :
           : T)                                      26.0( 11.0)                          :
           : M)                                      26.5( 11.5)                          :
   12      :      15.2       11.8        14.9        27.1                                 :
           : T)                                                                           :
           : M)                                                                           :
   15      :      20.3       14.7        17.3        29.8                                 :
           : T)  24.8( 17.7) 19.6( 19.8) 18.5( 16.8)                                      :
           : M)                                                                           :
   20      :      28.8       19.8        21.0                                             :
           : T)                                                                           :
           : M)  34.9( 24.1)                                                              :
   25      :                 24.9        25.0                                             :
           : T)                                                                           :
           : M)              27.4( 27.9) 25.7( 25.5)                                      :
           ---------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  34.9( 24.0)  27.5( 27.8)  26.0( 25.6)  33.3( 17.5)  47.3( 11.3)  99.9(  5.3)
```

TABLE 77

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.00

```
                                    DENSIMETRIC FROUDE NUMBER

                       1            3          10          30          100         1000
  RISE(DIA)  ----------------------------------------------------------------------------------
             : T)                                                                             :
             : M)                                                             25.1(  0.0) :
      1      :       1.9          2.7         5.3        10.6         23.6        61.8        :
             : T)                                                                             :
             : M)                                                 25.3(  1.3)             :
      2      :       2.7          3.5         6.7        13.4         28.6        71.0        :
             : T)                                                                             :
             : M)                                                                             :
      3      :       3.6          4.3         7.7        15.5         31.3        77.1        :
             : T)                                                                             :
             : M)                                                                             :
      4      :       4.6          5.0         8.7        17.0         33.3        82.1        :
             : T)                                                                             :
             : M)                                                                             :
      5      :       5.7          5.8         9.5        18.5         35.0        86.1        :
             : T)                                                             92.5(  6.7) :
             : M)                                                                             :
      7      :       8.1          7.4        11.2        21.0         37.8        93.5        :
             : T)                                                                             :
             : M]                                                                             :
      9      :      10.9          9.1        12.6        23.1         39.9       101.0        :
             : T)                                                                             :
             : M]                                                                             :
     12      :      15.5         11.9        14.9        26.2         42.6                    :
             : T)                                                 44.3( 14.3)             :
             : M]                                    27.5[ 13.5]                          :
     15      :      20.7         14.9        17.1        28.6         45.0                    :
             : T)                                                                             :
             : M]                                                                             :
     20      :      30.5         20.5        21.0        32.0         48.9                    :
             : T)                                    32.7( 21.5)                          :
             : M]                                                                             :
     25      :      41.1         26.5        24.8        34.6                                 :
             : T)   43.7( 26.2)  33.8( 30.9) 28.4( 29.7)                                      :
             : M]                                                                             :
     33      :      58.0         36.8        31.1        38.6                                 :
             : T)                                                                             :
             : M]   61.4[ 35.2]  46.8[ 41.8] 35.9[ 39.2]                                      :
     42      :                   47.0        37.6                                             :
             : T)                                                                             :
             : M]                                                                             :
             ----------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  61.5( 35.3)  47.2( 42.6)  38.6( 43.9)  40.5( 34.7)  54.9( 24.1) 116.0( 11.4)
```

TABLE 78

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.00

```
                                      DENSIMETRIC FROUDE NUMBER

                           1            3           10           30          100         1000
RISE(DIA)    -------------------------------------------------------------------------------------
             : T)                                                                                :
             : M)                                                                 25.1(  0.0)   :
    1        :           1.9          2.7          5.3         10.6         23.4       61.8      :
             : T)                                                                                :
             : M)                                                      25.3(  1.3)               :
    2        :           2.7          3.5          6.7         13.4         28.6       70.5      :
             : T)                                                                                :
             : M)                                                                                :
    3        :           3.6          4.3          7.7         15.3         31.3       76.6      :
             : T)                                                                                :
             : M)                                                                                :
    4        :           4.6          5.0          8.7         17.0         33.1       80.9      :
             : T)                                                                                :
             : M)                                                                                :
    5        :           5.7          5.8          9.5         18.4         34.8       84.4      :
             : T)                                                                                :
             : M)                                                                                :
    7        :           8.1          7.4         11.1         20.8         37.2       90.5      :
             : T)                                                                                :
             : M)                                                                                :
    9        :          10.9          9.1         12.6         22.9         39.1       95.4      :
             : T)                                                                                :
             : M)                                                                                :
   12        :          15.6         12.0         14.8         25.8         41.6      102.0      :
             : T)                                                                                :
             : M)                                        28.2( 15.0)                             :
   15        :          21.0         15.0         17.1         28.4         43.7      107.0      :
             : T)                                                                                :
             : M)                                                                                :
   20        :          31.1         20.8         21.0         31.8         46.5      114.0      :
             : T)                                                                 116.0( 21.1)   :
             : M)                                                                                :
   25        :          42.8         27.1         25.1         34.3         48.9      121.0      :
             : T)                                                                                :
             : M)                                                                                :
   33        :          64.0         38.6         31.8         38.3         52.3      134.0      :
             : T)                                                                                :
             : M)                                                                                :
   42        :          90.4         53.0         40.2         41.9         55.6                 :
             : T) 104.0( 46.4)                                         56.3( 44.1)               :
             : M)                                                                                :
   54        :         127.0         74.0         52.0         46.7         59.8                 :
             : T)              79.3( 57.3)  59.3( 63.4)  48.1( 58.3)                             :
             : M) 138.0( 58.2) 93.6( 65.3)  53.0( 55.4)                                          :
   70        :                      99.7         63.7         52.1         65.7                 :
             : T)                                                                                :
             : M)                                                                                :
   90        :                                   72.6         57.7                               :
             : T)                                                                                :
             : M)                                                                                :
             -------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 143.0( 61.8) 105.0( 77.6)  73.1( 92.2)  59.4( 94.3)  70.2( 75.3) 145.0( 36.3)
```

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TABLE 79

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.00

```
                                      DENSIMETRIC FROUDE NUMBER

                              1             3            10            30           100          1000
RISE(DIA)   ---------------------------------------------------------------------------------------------
            : T)                                                                                        :
            : M]                                                                           25.1[  0.0]  :
     1      :               1.9           2.7           5.3          10.6          23.4          61.3   :
            : T)                                                                                        :
            : M]                                                              25.3[  1.3]               :
     2      :               2.7           3.5           6.7          13.4          28.6          70.5   :
            : T)                                                                                        :
            : M]                                                                                        :
     3      :               3.6           4.3           7.7          15.3          31.3          76.0   :
            : T)                                                                                        :
            : M]                                                                                        :
     4      :               4.6           5.0           8.7          17.0          33.1          80.4   :
            : T)                                                                                        :
            : M]                                                                                        :
     5      :               5.7           5.8           9.5          18.4          34.8          84.4   :
            : T)                                                                                        :
            : M]                                                                                        :
     7      :               8.1           7.4          11.1          20.8          37.2          90.0   :
            : T)                                                                                        :
            : M]                                                                                        :
     9      :              10.9           9.1          12.6          22.9          39.1          94.5   :
            : T)                                                                                        :
            : M]                                                                                        :
    12      :              15.6          12.0          14.8          25.6          41.3         100.0   :
            : T)                                                                                        :
            : M]                                                                                        :
    15      :              21.0          15.0          17.1          28.2          43.5         105.0   :
            : T)                                                                                        :
            : M]                                                 28.6[ 15.6]                            :
    20      :              31.3          20.8          21.0          31.5          46.2         111.0   :
            : T)                                                                                        :
            : M]                                                                                        :
    25      :              43.4          27.3          25.1          34.3          48.2         116.0   :
            : T)                                                                                        :
            : M]                                                                                        :
    33      :              65.3          39.1          32.0          38.3          51.4         123.0   :
            : T)                                                                                        :
            : M]                                                                                        :
    42      :              94.3          54.2          40.5          42.5          54.4         130.0   :
            : T)                                                                                        :
            : M]                                                                                        :
    54      :             138.0          76.6          53.0          47.4          58.0         137.0   :
            : T)                                                                                        :
            : M]                                   60.9[ 61.3]                                          :
    70      :             204.0         111.0          69.5          53.8          62.1         146.0   :
            : T) 275.0( 87.4)                                                             151.0( 80.5)  :
            : M] 246.0[ 79.5] 131.0[ 78.7]                                                              :
    90      :             283.0         154.0          86.2          61.7          66.7         156.0   :
            : T)              189.0(113.0)                                                              :
            : M]                                                                                        :
   115      :                           192.0         105.0          70.7          72.1         168.0   :
            : T)                            125.0(146.0)                                                :
            : M]                                                                                        :
   148      :                           228.0         126.0          81.9          78.5                 :
            : T)                                          89.0(171.0)   80.6(160.0)                     :
            : M]                                                                                        :
   190      :                                         148.0          94.6          86.0                 :
            : T)                                                                                        :
            : M]                                                                                        :
   244      :                                                       107.0          94.9                 :
            : T)                                                                                        :
            : M]                                                                                        :
            ---------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 334.0(112.0) 232.0(154.0) 154.0(213.0) 111.0(267.0)  99.9(267.0) 173.0(123.0)
```

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TABLE 80

DIFFUSER PLUME DILUTION
PORT SPACING = 25 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.00

```
                                       DENSIMETRIC FROUDE NUMBER

                       1             3             10            30            100           1000
RISE(DIA)   ------------------------------------------------------------------------------------------
            : M]                                                                      25.1[  0.0]  :
    1       :         1.9           2.7           5.3          10.6          23.4        61.3      :
            : M]                                                          25.3[  1.3]              :
    2       :         2.7           3.5           6.7          13.4          28.6        70.5      :
            : M]                                                                                   :
    3       :         3.6           4.3           7.7          15.3          31.3        76.0      :
            : M]                                                                                   :
    4       :         4.6           5.0           8.7          17.0          33.1        80.4      :
            : M]                                                                                   :
    5       :         5.7           5.8           9.5          18.4          34.8        84.4      :
            : M]                                                                                   :
    7       :         8.1           7.4          11.1          20.8          37.2        90.0      :
            : M]                                                                                   :
    9       :        10.9           9.1          12.6          22.9          39.1        94.5      :
            : M]                                                                                   :
   12       :        15.7          12.0          14.8          25.6          41.3        99.9      :
            : M]                                                                                   :
   15       :        21.0          15.0          17.1          28.2          43.2       104.0      :
            : M]                                            28.6[ 15.6]                            :
   20       :        31.3          20.8          21.0          31.5          45.9       111.0      :
            : M]                                                                                   :
   25       :        43.4          27.3          25.1          34.3          48.2       116.0      :
            : M]                                                                                   :
   33       :        65.7          39.1          32.0          38.3          51.3       122.0      :
            : M]                                                                                   :
   42       :        94.9          54.1          40.8          42.5          54.1       128.0      :
            : M]                                                                                   :
   54       :       140.0          77.6          53.4          47.7          57.7       135.0      :
            : M]                              63.5[ 63.1]                                          :
   70       :       211.0         114.0          70.5          54.3          61.7       142.0      :
            : M] 297.0[ 86.9] 143.0[ 81.9]                                                         :
   90       :       313.0         162.0          88.6          62.4          66.3       149.0      :
            : M]                                                                                   :
  115       :       419.0         212.0         110.0          72.7          71.6       157.0      :
            : M]                                                                                   :
  148       :                     274.0         138.0          85.5          78.3       165.0      :
            : M]                                                                                   :
  190       :                     351.0         172.0         102.0          86.4                  :
            : M]                                                                                   :
  244       :                                   216.0         123.0          96.3                  :
            : M]                                                                                   :
            ------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 491.0(133.0) 363.0(197.0) 262.0(300.0) 145.0(301.0) 106.0(301.0) 174.0(191.0)
```

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TABLE 81

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.10

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	T)						436.0(0.7)
	M)						
1		1.9	2.8	6.4	16.4	51.6	571.0
	T)						
	M)						
2		2.7	3.7	8.8	23.3	73.5	
	T)						
	M)						
3		3.5	4.6	11.1	29.4	93.0	
	T)					96.9(3.2)	
	M)						
4		4.5	5.6	13.5	35.7	114.0	
	T)						
	M)						
5		5.6	6.6	16.1	42.2		
	T)				53.0(6.5)		
	M)						
7		8.1	8.8	22.2	57.2		
	T)						
	M)						
9		10.8	11.3	29.6	76.1		
	T)			38.0(10.8)			
	M)						
12		15.4	15.8	44.9			
	T)						
	M)						
15		20.5	21.4				
	T)	25.5(17.6)	26.2(17.0)				
	M)						
20		30.7	37.3				
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		67.2(23.4)	63.3(22.2)	66.1(14.7)	84.7(9.4)	152.0(4.9)	674.0(1.1)

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TABLE 82

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.10

```
                                      DENSIMETRIC FROUDE NUMBER

                       1            3            10           30           100          1000
RISE(DIA)   ----------------------------------------------------------------------------------------
            : T)                                                                                   :
            : M)                                                                                   :
     1      :         1.9          2.8          6.4          16.4         51.2         497.0       :
            : T)                                                                    592.0(  1.3)  :
            : M)                                                                                   :
     2      :         2.7          3.7          8.8          23.1         71.9         893.0       :
            : T)                                                                                   :
            : M)                                                                                   :
     3      :         3.6          4.6         11.0          29.0         89.2                     :
            : T)                                                                                   :
            : M)                                                                                   :
     4      :         4.5          5.6         13.4          35.2        105.0                     :
            : T)                                                                                   :
            : M)                                                                                   :
     5      :         5.6          6.6         16.0          41.3        122.0                     :
            : T)                                                       136.0(  5.9)                :
            : M)                                                                                   :
     7      :         8.1          8.8         21.7          54.9        156.0                     :
            : T)                                                                                   :
            : M)                                                                                   :
     9      :        10.9         11.2         28.6          70.0                                  :
            : T)                                            86.2( 11.0)                            :
            : M)                                                                                   :
    12      :        15.6         15.6         41.6          96.3                                  :
            : T)                                                                                   :
            : M)                                                                                   :
    15      :        21.0         20.7         58.0         129.0                                  :
            : T)                               69.5( 16.7)                                         :
            : M)                                                                                   :
    20      :        31.1         31.3         97.0                                                :
            : T)                                                                                   :
            : M)                                                                                   :
    25      :        43.1         46.5                                                             :
            : T)  45.6( 26.0)  48.8( 25.6)                                                         :
            : M)                                                                                   :
    33      :        72.5                                                                          :
            : T)                                                                                   :
            : M)                                                                                   :
            ----------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 128.0( 34.0) 121.0( 32.3) 120.0( 22.0) 138.0( 15.4) 215.0(  8.8) 929.0(  2.0)
```

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TABLE 83

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.10

```
                                      DENSIMETRIC FROUDE NUMBER

                      1             3            10            30           100          1000
RISE(DIA)   ---------------------------------------------------------------------------------------------
            : T)                                                                                        :
            : M)                                                                                        :
     1      :        1.9           2.8           6.4          16.4          50.9         477.0          :
            : T)                                                                                        :
            : M)                                                                                        :
     2      :        2.7           3.7           8.8          22.9          71.0         689.0          :
            : T)                                                                                        :
            : M)                                                                                        :
     3      :        3.6           4.6          11.0          29.0          87.3         867.0          :
            : T)                                                                         929.0(  3.4)   :
            : M)                                                                                        :
     4      :        4.5           5.6          13.4          35.0         102.0                        :
            : T)                                                                                        :
            : M)                                                                                        :
     5      :        5.6           6.6          15.9          41.0         117.0                        :
            : T)                                                                                        :
            : M)                                                                                        :
     7      :        8.1           8.7          21.5          54.2         147.0                        :
            : T)                                                                                        :
            : M)                                                                                        :
     9      :       10.9          11.2          28.2          68.5         176.0                        :
            : T)                                                                                        :
            : M)                                                                                        :
    12      :       15.7          15.5          40.2          92.3         224.0                        :
            : T)                                                         254.0( 13.8)                   :
            : M)                                                                                        :
    15      :       21.1          20.4          55.3         120.0         277.0                        :
            : T)                                                                                        :
            : M)                                                                                        :
    20      :       31.5          30.5          86.8         173.0                                      :
            : T)                                           197.0( 22.0)                                 :
            : M)                                                                                        :
    25      :       44.0          42.8         129.0         236.0                                      :
            : T)                             178.0( 29.8)                                               :
            : M)                                                                                        :
    33      :       67.1          69.5         218.0                                                    :
            : T)                                                                                        :
            : M)                                                                                        :
    42      :       98.3         114.0                                                                  :
            : T) 112.0( 45.5) 132.0( 44.3)                                                              :
            : M)                                                                                        :
    54      :      157.0         303.0                                                                  :
            : T)                                                                                        :
            : M)                                                                                        :
            ---------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 326.0( 58.2) 310.0( 54.2) 297.0( 38.1) 314.0( 29.8) 402.0( 20.0) 974.0(  3.6)
```

TABLE 84

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.10

		DENSIMETRIC FROUDE NUMBER					
RISE(DIA)		1	3	10	30	100	1000
	T)						
	M)						
1		1.9	2.8	6.4	16.4	50.9	474.0
	T)						
	M)						
2		2.7	3.7	8.8	22.9	71.0	670.0
	T)						
	M)						
3		3.6	4.6	11.0	29.0	87.3	819.0
	T)						
	M)						
4		4.5	5.6	13.4	35.0	102.0	954.0
	T)						
	M)						
5		5.6	6.6	15.9	41.0	116.0	
	T)						
	M)						
7		8.1	8.7	21.5	54.1	145.0	
	T)						
	M)						
9		10.9	11.2	28.0	68.1	173.0	
	T)						
	M)						
12		15.7	15.5	39.9	91.7	218.0	
	T)						
	M)						
15		21.1	20.4	54.5	118.0	265.0	
	T)						
	M)						
20		31.8	30.3	85.0	170.0	351.0	
	T)						
	M)						
25		44.0	42.5	124.0	230.0	444.0	
	T)					611.0(32.9)	
	M)						
33		67.6	67.1	203.0	344.0	613.0	
	T)						
	M)						
42		99.0	103.0	319.0	500.0		
	T)			525.0(54.1)	544.0(44.4)		
	M)						
54		150.0	171.0				
	T)						
	M)						
70		234.0	317.0				
	T)	322.0(83.6)	432.0(77.8)				
	M)						
90		375.0					
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		546.0(101.0)	720.0(88.9)	671.0(61.0)	668.0(50.4)	690.0(36.2)	974.0(4.2)

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TABLE 85

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.10

	DENSIMETRIC FROUDE NUMBER					
RISE(DIA)	1	3	10	30	100	1000
1	1.9	2.8	6.4	16.4	50.9	474.0
2	2.7	3.7	8.8	22.9	71.0	666.0
3	3.6	4.6	11.0	28.8	86.7	813.0
4	4.5	5.6	13.4	34.8	102.0	934.0
5	5.6	6.6	15.9	41.0	116.0	
7	8.1	8.7	21.4	53.8	144.0	
9	10.9	11.2	28.0	68.1	172.0	
12	15.7	15.3	39.9	91.7	217.0	
15	21.1	20.4	54.1	118.0	263.0	
20	31.8	30.3	84.4	170.0	347.0	
25	44.3	42.2	123.0	229.0	438.0	
33	67.6	66.7	199.0	342.0	601.0	
42	99.6	102.0	311.0	492.0		
54	151.0	164.0	501.0	737.0		
70	234.0	278.0				
90	363.0	481.0				
115	563.0					
DIL AT MAX REAL OR PERMITTED RISE	620.0(121.0)	730.0(108.0)	795.0(68.6)	794.0(56.6)	787.0(41.2)	974.0(4.4)

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TABLE 86

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.05

RISE(DIA)		DFNSIMETRIC FROUDE NUMBER 1	3	10	30	100	1000
	T)						364.0(0.9)
	M)						
1		1.9	2.8	5.9	13.7	40.5	407.0
	T)						
	M)						
2		2.7	3.6	7.6	18.[illegible]	56.8	
	T)						
	M)						
3		3.6	4.4	9.1	22.5	71.0	
	T)					81.5(3.8)	
	M)						
4		4.6	5.1	10.3	26.2	84.4	
	T)						
	M)						
5		5.6	6.0	11.7	29.8	100.0	
	T)						
	M)						
7		8.1	7.6	14.3	37.8		
	T)				41.3(7.8)		
	M)						
9		10.8	9.4	17.3	46.8		
	T)						
	M)						
12		15.4	12.3	22.3			
	T)			26.0(13.8)			
	M)						
15		20.3	15.5	29.0			
	T)	24.9(17.7)	20.5(19.2)				
	M)						
20		29.3	21.7				
	T)						
	M)						
25			30.9				
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		56.5(23.9)	46.2(26.4)	48.9(19.4)	66.7(11.6)	127.0(5.8)	571.0(1.3)

TABLE 87

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.05

```
                                          DENSIMETRIC FROUDE NUMBER

                         1                 3                10                30               100              1000
RISE(DIA)     ------------------------------------------------------------------------------------------------------------
              : T)                                                                                                      :
              : M)                                                                                                      :
    1         :         1.9               2.8               5.9              13.7              40.2             374.0     :
              : T)                                                                                       491.0(  1.6)   :
              : M)                                                                                                      :
    2         :         2.7               3.6               7.6              18.5              56.1             583.0     :
              : T)                                                                                                      :
              : M)                                                                                                      :
    3         :         3.6               4.4               9.0              22.3              68.5                       :
              : T)                                                                                                      :
              : M)                                                                                                      :
    4         :         4.6               5.1              10.3              25.8              79.8                       :
              : T)                                                                                                      :
              : M)                                                                                                      :
    5         :         5.7               6.0              11.6              29.4              90.4                       :
              : T)                                                                      112.0(  7.0)                    :
              : M)                                                                                                      :
    7         :         8.1               7.6              14.2              36.5                                         :
              : T)                                                                                                      :
              : M)                                                                                                      :
    9         :        10.9               9.4              16.9              44.3             137.0                       :
              : T)                                                                                                      :
              : M)                                                                                                      :
   12         :        15.5              12.3              21.4              57.2                                         :
              : T)                                                      65.8( 13.7)                                     :
              : M)                                                                                                      :
   15         :        20.8              15.6              26.5              73.0                                         :
              : T)                                                                                                      :
              : M)                                                                                                      :
   20         :        30.7              21.6              37.3                                                           :
              : T)                                    45.2( 22.8)                                                       :
              : M)                                                                                                      :
   25         :        41.3              28.6              53.1                                                           :
              : T)    44.0( 26.2)     36.2( 29.9)                                                                       :
              : M)                                                                                                      :
   33         :        59.6              42.2                                                                             :
              : T)                                                                                                      :
              : M)                                                                                                      :
              ------------------------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 109.0( 35.1)  91.4( 39.9)  90.9( 30.5) 108.0( 19.5) 176.0( 10.6) 770.0(  2.4)
```

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TABLE 88

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.05

```
                              DENSIMETRIC FROUDE NUMBER

                        1           3          10          30         100         1000
RISE(DIA)   ------------------------------------------------------------------------------
            : T)                                                                         :
            : M)                                                                         :
    1       :          1.9         2.8         5.9        13.7        39.9        364.0   :
            : T)                                                                         :
            : M)                                                                         :
    2       :          2.7         3.6         7.6        18.5        55.7        519.0   :
            : T)                                                                         :
            : M)                                                                         :
    3       :          3.6         4.4         9.0        22.2        67.6        647.0   :
            : T)                                                                         :
            : M)                                                                         :
    4       :          4.6         5.1        10.3        25.6        78.2        770.0   :
            : T)                                                                774.0(  4.1) :
            : M)                                                                         :
    5       :          5.7         6.0        11.6        29.0        88.0        906.0   :
            : T)                                                                         :
            : M)                                                                         :
    7       :          8.1         7.6        14.1        36.0       107.0                :
            : T)                                                                         :
            : M)                                                                         :
    9       :         10.9         9.4        16.7        43.4       126.0                :
            : T)                                                                         :
            : M)                                                                         :
   12       :         15.6        12.3        21.0        55.3       155.0                :
            : T)                                                                         :
            : M)                                                                         :
   15       :         21.0        15.6        25.8        68.5       186.0                :
            : T)                                                    205.0( 16.8)         :
            : M)                                                                         :
   20       :         31.3        21.7        35.0        94.9       244.0                :
            : T)                                                                         :
            : M)                                                                         :
   25       :         43.1        28.6        45.9       125.0                            :
            : T)                                         150.0( 28.5)                     :
            : M)                                                                         :
   33       :         64.4        41.6        69.0       187.0                            :
            : T)                                                                         :
            : M)                                                                         :
   42       :         91.1        58.9       108.0                                        :
            : T) 105.0( 46.4)            117.0( 43.7)                                     :
            : M)                                                                         :
   54       :        130.0        87.4       214.0                                        :
            : T)              88.6( 54.6)                                                 :
            : M)                                                                         :
   70       :                    208.0                                                    :
            : T)                                                                         :
            : M)                                                                         :
            ------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 285.0( 61.1) 245.0( 70.5) 236.0( 55.4) 247.0( 38.5) 324.0( 24.4) 914.0(  5.1)
```

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TABLE 89

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.05

```
                                      DENSIMETRIC FROUDE NUMBER

                        1              3              10             30             100            1000
RISE(DIA)   ----------------------------------------------------------------------------------------------------
            : T)                                                                                               :
            : M]                                                                                               :
    1       :          1.9            2.8            5.9            13.7           39.9          362.0         :
            : T)                                                                                               :
            : M]                                                                                               :
    2       :          2.7            3.6            7.6            18.5           55.3          508.0         :
            : T)                                                                                               :
            : M]                                                                                               :
    3       :          3.6            4.4            9.0            22.2           67.1          621.0         :
            : T)                                                                                               :
            : M]                                                                                               :
    4       :          4.6            5.1           10.3            25.6           77.6          719.0         :
            : T)                                                                                               :
            : M]                                                                                               :
    5       :          5.7            6.0           11.6            29.0           87.3          807.0         :
            : T)                                                                                               :
            : M]                                                                                               :
    7       :          8.1            7.6           14.0            36.0          106.0                        :
            : T)                                                                                               :
            : M]                                                                                               :
    9       :         10.9            9.4           16.7            43.1          124.0                        :
            : T)                                                                                               :
            : M]                                                                                               :
   12       :         15.7           12.3           21.0            54.9          152.0                        :
            : T)                                                                                               :
            : M]                                                                                               :
   15       :         21.0           15.6           25.6            67.6          180.0                        :
            : T)                                                                                               :
            : M]                                                                                               :
   20       :         31.3           21.7           34.5            92.3          230.0                        :
            : T)                                                                                               :
            : M]                                                                                               :
   25       :         43.4           28.8           44.9           122.0          285.0                        :
            : T)                                                                                               :
            : M]                                                                                               :
   33       :         65.3           41.6           65.3           177.0          382.0                        :
            : T)                                                              486.0( 40.6)                     :
            : M]                                                                                               :
   42       :         94.3           58.8           94.9           254.0          506.0                        :
            : T)                                                                                               :
            : M]                                                                                               :
   54       :        139.0           86.2          148.0           379.0                                       :
            : T)                                                426.0( 57.9)                                   :
            : M]                                                                                               :
   70       :        205.0          131.0          256.0                                                       :
            : T) 285.0( 87.2)                 374.0( 81.7)                                                     :
            : M]                                                                                               :
   90       :        299.0          201.0          492.0                                                       :
            : T)                258.0(103.0)                                                                   :
            : M]                                                                                               :
  115       :                       332.0                                                                      :
            : T)                                                                                               :
            : M]                                                                                               :
            ----------------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 410.0(109.0) 558.0(127.0) 602.0( 96.1) 577.0( 69.0) 598.0( 48.0) 914.0(  6.4)
```

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TABLE 90

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.05

	DENSIMETRIC FROUDE NUMBER					
RISE(DIA)	1	3	10	30	100	1000
1	1.9	2.8	5.9	13.7	39.9	362.0
2	2.7	3.6	7.6	18.5	55.3	508.0
3	3.6	4.4	9.0	22.2	67.1	617.0
4	4.6	5.1	10.3	25.6	77.6	710.0
5	5.7	6.0	11.6	29.0	87.3	791.0
7	8.1	7.6	14.0	36.0	105.0	
9	10.9	9.4	16.7	43.1	124.0	
12	15.7	12.3	21.0	54.5	151.0	
15	21.1	15.6	25.4	67.6	180.0	
20	31.5	21.7	34.3	92.3	229.0	
25	43.4	28.8	44.6	121.0	282.0	
33	65.7	41.9	64.4	175.0	376.0	
42	94.9	59.3	92.3	249.0	493.0	
54	141.0	86.1	141.0	367.0	670.0	
70	212.0	131.0	227.0	564.0		
90	317.0	199.0	379.0			
115	470.0	302.0	637.0			
148		476.0				
DIL AT MAX REAL OR PERMITTED RISE	571.0(130.0)	551.0(160.0)	689.0(119.0)	717.0(80.7)	708.0(56.5)	914.0(6.7)

TABLE 91

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.02

```
                                    DENSIMETRIC FROUDE NUMBER

                       1            3           10           30          100          1000
RISE(DIA)  ----------------------------------------------------------------------------------
           : T)                                                                             :
           : M)                                                                             :
    1      :          1.9          2.7          5.5         11.9         30.5        265.0  :
           : T)                                                                 282.0(  1.1) :
           : M)                                                                             :
    2      :          2.7          3.6          7.1         15.5         41.6               :
           : T)                                                                             :
           : M)                                                                             :
    3      :          3.6          4.3          8.2         18.2         50.5               :
           : T)                                                                             :
           : M)                                                                             :
    4      :          4.6          5.1          9.3         20.5         58.4               :
           : T)                                                     64.0(  4.7)             :
           : M)                                                                             :
    5      :          5.7          5.9         10.2         22.6         66.7               :
           : T)                                                                             :
           : M)                                                                             :
    7      :          8.1          7.5         12.0         26.5         89.8               :
           : T)                                                                             :
           : M)                                                                             :
    9      :         10.8          9.2         13.7         30.5                            :
           : T)                                        31.5(  9.5)                          :
           : M)                                                                             :
   12      :         15.2         12.0         16.2         37.5                            :
           : T)                                                                             :
           : M)                                                                             :
   15      :         20.3         14.9         19.0                                         :
           : T)  24.8( 17.6)  19.7( 19.6)  19.8( 16.0)                                      :
           : M)                                                                             :
   20      :         29.0         20.1         24.4                                         :
           : T)                                                                             :
           : M)                                                                             :
   25      :                      25.6                                                      :
           : T)                                                                             :
           : M)                                                                             :
           ----------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  45.8( 24.0)  34.8( 27.6)  33.5( 23.8)  49.2( 14.5)  99.7(  7.2) 439.0(  1.7)
```

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TABLE 92

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.02

		DENSIMETRIC FROUDE NUMBER					
RISE(DIA)		1	3	10	30	100	1000
	T)						
	M)						
1		1.9	2.7	5.5	11.9	30.5	254.0
	T)						
	M)						
2		2.7	3.6	7.1	15.5	41.0	374.0
	T)						380.0(2.1)
	M)						
3		3.6	4.3	8.2	18.1	49.1	528.0
	T)						
	M)						
4		4.6	5.1	9.3	20.4	56.5	
	T)						
	M)						
5		5.7	5.9	10.2	22.3	63.1	
	T)						
	M)						
7		8.1	7.5	11.9	25.8	75.0	
	T)					86.2(8.9)	
	M)						
9		10.9	9.2	13.5	29.2	87.4	
	T)						
	M)						
12		15.5	12.0	16.0	34.3	109.0	
	T)						
	M)						
15		20.7	15.1	18.5	39.6		
	T)				44.9(17.7)		
	M)						
20		30.5	20.7	22.9	50.2		
	T)						
	M)						
25		41.3	26.9	27.9	65.8		
	T)	43.7(26.2)	34.1(30.7)	30.9(28.1)			
	M)						
33		58.4	37.3	37.0			
	T)						
	M)						
42			58.3				
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		90.6(35.3)	67.9(42.1)	59.1(40.2)	74.4(26.3)	135.0(13.5)	594.0(3.1)

TABLE 93

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.02

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	T)						
	M)						
1		1.9	2.7	5.5	11.9	30.5	249.0
	T)						
	M)						
2		2.7	3.6	7.1	15.3	40.8	352.0
	T)						
	M)						
3		3.6	4.3	8.2	18.0	48.8	433.0
	T)						
	M)						
4		4.6	5.1	9.3	20.2	55.7	508.0
	T)						
	M)						
5		5.7	5.9	10.1	22.2	61.3	578.0
	T)						594.0(5.2)
	M)						
7		8.1	7.5	11.9	25.6	71.9	744.0
	T)						
	M)						
9		10.9	9.2	13.5	28.8	82.1	
	T)						
	M)						
12		15.6	12.0	15.9	33.3	96.3	
	T)						
	M)						
15		21.0	15.1	18.4	38.0	111.0	
	T)						
	M)						
20		31.1	21.0	22.6	46.2	137.0	
	T)					149.0(22.2)	
	M)						
25		42.8	27.5	27.3	54.9	166.0	
	T)						
	M)						
33		64.0	38.8	35.2	71.0		
	T)				91.7(41.1)		
	M)						
42		90.4	53.4	45.5	94.9		
	T)	104.0(46.4)					
	M)						
54		127.0	74.5	60.9	147.0		
	T)		79.8(57.0)	69.0(59.5)			
	M)						
70			105.0	89.2			
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		251.0(61.6)	190.0(76.4)	160.0(80.1)	170.0(56.8)	238.0(32.7)	807.0(7.5)

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TABLE 94

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.02

```
                                    DENSIMETRIC FROUDE NUMBER

                      1              3              10             30             100            1000
RISE(DIA)  ------------------------------------------------------------------------------------------------
           : T)                                                                                          :
           : M)                                                                                          :
    1      :         1.9            2.7            5.5            11.9           30.5           249.0    :
           : T)                                                                                          :
           : M)                                                                                          :
    2      :         2.7            3.6            7.1            15.3           40.8           347.0    :
           : T)                                                                                          :
           : M)                                                                                          :
    3      :         3.6            4.3            8.2            18.0           48.8           421.0    :
           : T)                                                                                          :
           : M)                                                                                          :
    4      :         4.6            5.1            9.3            20.2           55.3           487.0    :
           : T)                                                                                          :
           : M)                                                                                          :
    5      :         5.7            5.9           10.1            22.2           60.9           545.0    :
           : T)                                                                                          :
           : M)                                                                                          :
    7      :         8.1            7.5           11.9            25.4           71.4           644.0    :
           : T)                                                                                          :
           : M)                                                                                          :
    9      :        10.9            9.2           13.5            28.6           80.9           735.0    :
           : T)                                                                                          :
           : M)                                                                                          :
   12      :        15.6           12.0           15.9            33.1           94.9                    :
           : T)                                                                                          :
           : M)                                                                                          :
   15      :        21.0           15.2           18.4            37.5          108.0                    :
           : T)                                                                                          :
           : M)                                                                                          :
   20      :        31.3           21.0           22.6            45.2          131.0                    :
           : T)                                                                                          :
           : M)                                                                                          :
   25      :        43.4           27.5           27.1            53.4          156.0                    :
           : T)                                                                                          :
           : M)                                                                                          :
   33      :        65.3           39.4           35.2            67.6          199.0                    :
           : T)                                                                                          :
           : M)                                                                                          :
   42      :        94.3           54.5           45.2            86.1          252.0                    :
           : T)                                                                                          :
           : M)                                                                                          :
   54      :       138.0           77.6           60.1           115.0          334.0                    :
           : T)                                                              347.0( 55.8)                :
           : M)                                                                                          :
   70      :       204.0          112.0           83.2           165.0          466.0                    :
           : T) 282.0( 87.2)                                                                             :
           : M)                                                                                          :
   90      :       295.0          162.0          118.0           257.0                                   :
           : T)             216.0(110.0)                  264.0( 91.5)                                   :
           : M)                                                                                          :
  115      :                      229.0          171.0           461.0                                   :
           : T)                                193.0(124.0)                                              :
           : M)                                                                                          :
  140      :                                     293.0                                                   :
           : T)                                                                                          :
           : M)                                                                                          :
           ------------------------------------------------------------------------------------------------

DIL AT MAX REAL
ON PERMITTED RISE 384.0(110.0) 337.0(144.0) 470.0(158.0) 467.0(116.0) 478.0( 71.3) 807.0( 10.7)
```

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TABLE 95

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.02

	DENSIMETRIC FROUDE NUMBER					
RISE(DIA)	1	3	10	30	100	1000
1	1.9	2.7	5.5	11.9	30.5	249.0
2	2.7	3.6	7.1	15.3	40.8	347.0
3	3.6	4.3	8.2	18.0	48.5	421.0
4	4.6	5.1	9.3	20.2	55.3	484.0
5	5.7	5.9	10.1	22.2	60.9	539.0
7	8.1	7.5	11.9	25.4	71.4	632.0
9	10.9	9.2	13.5	28.6	80.9	712.0
12	15.7	12.0	15.9	33.1	94.3	
15	21.0	15.2	18.2	37.5	108.0	
20	31.3	21.1	22.6	45.2	131.0	
25	43.4	27.7	27.1	53.0	154.0	
33	65.7	39.4	35.0	66.7	195.0	
42	94.9	54.9	45.2	84.4	245.0	
54	140.0	78.2	60.1	111.0	320.0	
70	211.0	114.0	83.2	154.0	435.0	
90	316.0	167.0	117.0	221.0		
115	468.0	243.0	166.0	328.0		
148		360.0	247.0	512.0		
190			371.0			
DIL AT MAX REAL OR PERMITTED RISE	570.0(130.0)	486.0(179.0)	460.0(216.0)	565.0(156.0)	598.0(89.6)	807.0(11.7)

TABLE 96

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.00

```
                                 DENSIMETRIC FROUDE NUMBER

                    1             3             10            30            100           1000
RISE(DIA)   ------------------------------------------------------------------------------------
            : T)                                                                               :
            : M)                                                                               :
    1       :      1.9           2.7           5.3           10.6          23.6          111.0 :
            : T)                                                                  144.0(  2.0) :
            : M)                                                                               :
    2       :      2.7           3.5           6.7           13.5          29.8          146.0 :
            : T)                                                                               :
            : M)                                                                               :
    3       :      3.6           4.3           7.8           15.5          34.5          187.0 :
            : T)                                                                               :
            : M)                                                                               :
    4       :      4.6           5.0           8.7           17.1          38.6                :
            : T)                                                                               :
            : M)                                                                               :
    5       :      5.7           5.8           9.6           18.6          41.9                :
            : T)                                                     45.5(  6.1)               :
            : M)                                                                               :
    7       :      8.1           7.4           11.2          21.3          48.8                :
            : T)                                                                               :
            : M)                                                                               :
    9       :      10.8          9.1           12.7          23.7          56.9                :
            : T)                                       26.0( 11.0)                             :
            : M)                                                                               :
   12       :      15.2          11.8          14.9          27.3                              :
            : T)                                                                               :
            : M)                                                                               :
   15       :      20.3          14.7          17.3          30.9                              :
            : T) 24.8( 17.7)  19.6( 19.8)  18.5( 16.8)                                         :
            : M)                                                                               :
   20       :      28.8          19.8          21.0                                            :
            : T)                                                                               :
            : M)                                                                               :
   25       :                    24.9          25.0                                            :
            : T)                                                                               :
            : M)                                                                               :
            ------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  34.9( 24.0)  27.5( 27.8)  26.1( 25.6)  36.6( 17.3)  64.3(  9.8) 203.0(  3.1)
```

TABLE 97

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.00

		DENSIMETRIC FROUDE NUMBER					
RISE(DIA)		1	3	10	30	100	1000
	T)						
	M)						
1		1.9	2.7	5.3	10.6	23.6	110.0
	T)						
	M)						
2		2.7	3.5	6.7	13.4	29.6	140.0
	T)						
	M)						
3		3.6	4.3	7.7	15.5	34.0	163.0
	T)						181.0(3.9)
	M)						
4		4.6	5.0	8.7	17.0	37.8	185.0
	T)						
	M)						
5		5.7	5.8	9.5	18.5	40.8	206.0
	T)						
	M)						
7		8.1	7.4	11.2	21.0	46.2	
	T)						
	M)						
9		10.9	9.1	12.6	23.1	50.9	
	T)					57.6(12.1)	
	M)						
12		15.5	11.9	14.9	26.2		
	T)						
	M)						
15		20.7	14.9	17.1	28.8	64.4	
	T)						
	M)						
20		30.5	20.5	21.0	33.3		
	T)				34.3(21.3)		
	M)						
25		41.1	26.5	24.8	37.8		
	T)	43.7(26.2)	33.8(30.9)	28.4(29.7)			
	M)						
33		58.0	36.8	31.1	46.7		
	T)						
	M)						
42			47.0	38.1			
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		61.6(35.3)	47.5(42.6)	40.0(43.9)	48.2(33.3)	81.1(19.4)	255.0(6.2)

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TABLE 98

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.00

```
                                    DENSIMETRIC FROUDE NUMBER

                      1          3          10          30          100          1000
RISE(DIA)  ------------------------------------------------------------------------------
           ! T)                                                                         !
           ! M)                                                                         !
    1      !         1.9        2.7         5.3         10.6        23.4        109.0   !
           ! T)                                                                         !
           ! M)                                                                         !
    2      !         2.7        3.5         6.7         13.4        29.6        138.0   !
           ! T)                                                                         !
           ! M)                                                                         !
    3      !         3.6        4.3         7.7         15.3        34.0        159.0   !
           ! T)                                                                         !
           ! M)                                                                         !
    4      !         4.6        5.0         8.7         17.0        37.5        175.0   !
           ! T)                                                                         !
           ! M)                                                                         !
    5      !         5.7        5.8         9.5         18.4        40.5        190.0   !
           ! T)                                                                         !
           ! M)                                                                         !
    7      !         8.1        7.4        11.1         20.8        45.2        213.0   !
           ! T)                                                                         !
           ! M)                                                                         !
    9      !        10.9        9.1        12.6         22.9        49.5        236.0   !
           ! T)                                                             255.0( 10.8)!
           ! M)                                                                         !
   12      !        15.6       12.0        14.8         25.8        54.9        267.0   !
           ! T)                                                                         !
           ! M)                                                                         !
   15      !        21.0       15.0        17.1         28.4        59.7        302.0   !
           ! T)                                                                         !
           ! M)                                                                         !
   20      !        31.1       20.8        21.0         32.4        66.6                !
           ! T)                                                                         !
           ! M)                                                                         !
   25      !        42.8       27.1        25.1         36.2        73.1                !
           ! T)                                                                         !
           ! M)                                                                         !
   33      !        64.0       38.6        31.8         42.2        82.8                !
           ! T)                                               83.6( 33.8)             !
           ! M)                                                                         !
   42      !        90.4       53.0        40.2         49.1        93.8                !
           ! T) 104.0( 46.4)                         57.8( 54.1)                        !
           ! M)                                                                         !
   54      !       127.0       74.0        52.0                                         !
           ! T)            79.3( 57.3) 60.9( 63.3)                                      !
           ! M)                                                                         !
   70      !                  102.0        68.1         69.8                            !
           ! T)                                                                         !
           ! M)                                                                         !
           ------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 146.0( 61.7) 111.0( 77.3)  85.8( 89.6)  81.5( 82.4) 117.0( 53.7) 359.0( 17.4)
```

TABLE 99

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.00

	DENSIMETRIC FROUDE NUMBER					
RISE(DIA)	1	3	10	30	100	1000
1	1.9	2.7	5.3	10.6	23.4	109.0
2	2.7	3.5	6.7	13.4	29.6	137.0
3	3.6	4.3	7.7	15.3	33.8	157.0
4	4.6	5.0	8.7	17.0	37.2	173.0
5	5.7	5.8	9.5	18.4	40.2	186.0
7	8.1	7.4	11.1	20.8	45.2	208.0
9	10.9	9.1	12.6	22.9	49.1	228.0
12	15.6	12.0	14.8	25.6	54.5	251.0
15	21.0	15.0	17.1	28.2	58.8	272.0
20	31.3	20.8	21.0	32.2	65.7	302.0
25	43.4	27.3	25.1	36.0	71.2	328.0
33	65.3	39.1	32.0	41.9	79.3	367.0 381.0(36.0)
42	94.3	54.2	40.5	48.8	88.0	
54	138.0	76.6	53.0	58.0	98.3	
70	204.0 282.0(87.3)	111.0	71.4	70.4	112.0	
90	295.0	160.0 215.0(111.0)	96.8	87.0	127.0 139.0(106.0)	
115		226.0	131.0 160.0(135.0)	109.0 130.0(139.0)	147.0	
148			179.0	138.0	173.0	
190				174.0		
DIL AT MAX PEAK OR PERMITTED RISE	381.0(110.0)	298.0(145.0)	225.0(184.0)	183.0(201.0)	187.0(162.0)	407.0(41.5)

TABLE 100

DIFFUSER PLUME DILUTION
PORT SPACING = 1000 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.00

DENSIMETRIC FROUDE NUMBER

RISE(DIA)	1	3	10	30	100	1000
1	1.9	2.7	5.3	10.6	23.4	108.0
2	2.7	3.5	6.7	13.4	29.6	137.0
3	3.6	4.3	7.7	15.3	33.8	156.0
4	4.6	5.0	8.7	17.0	37.2	172.0
5	5.7	5.8	9.5	18.4	40.2	186.0
7	8.1	7.4	11.1	20.8	45.2	208.0
9	10.9	9.1	12.6	22.9	49.1	226.0
12	15.7	12.0	14.8	25.6	54.1	248.0
15	21.0	15.0	17.1	28.2	58.8	268.0
20	31.3	20.8	21.0	32.2	65.3	295.0
25	43.4	27.3	25.1	36.0	70.8	318.0
33	65.7	39.1	32.0	41.9	79.1	348.0
42	94.9	54.1	40.8	48.8	87.2	378.0
55	140.0	77.6	53.4	58.0	97.3	
70	211.0	114.0	71.9	70.5	110.0	
90	315.0	165.0	99.0	87.5	125.0	
115	468.0	242.0	136.0	111.0	143.0	
148		357.0	193.0	144.0	168.0	
190			276.0	191.0	200.0	
244			400.0	259.0	244.0	
DIL AT MAX REAL OR PERMITTED RISE	569.0(130.0)	485.0(180.0)	402.0(245.0)	329.0(294.0)	248.0(250.0)	407.0(52.5)

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EPA/600/6-85/002c
September 1985

WATER QUALITY ASSESSMENT:
A Screening Procedure for Toxic and Conventional Pollutants
(Revised 1985)

Part 111

by

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APPENDIX F

RESERVOIR SEDIMENT DEPOSITION SURVEYS

The material in this appendix consists of a reproduction of a bulletin compiled by F. E. Dendy and W. A. Champion, which provides data on rates of sedimentation in U. S. reservoirs.

INTRODUCTION

Data from known reliable reservoir sedimentation surveys made in the United States through 1970 are summarized in this bulletin. Additional data from surveys made after 1970 are included for a few reservoirs.

This bulletin supersedes USDA Miscellaneous Publication No. 1143, which was published in May, 1969.[1] All reservoir surveys reported in Miscellaneous Publication No. 1143 have been repeated in this bulletin. In addition, it includes surveys made before 1965, but not previously reported, and new data on reservoirs surveyed or resurveyed since 1965. The reservoirs are located in all of the 48 conterminous United States, except Florida, and in Puerto Rico. In addition to data on storage reservoirs and ponds, some information on debris basins is included.

A supplement to this bulletin, from which the data were extracted and summarized, contains detailed information about each of the reservoirs

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1/ Dendy, F.E. and Champion, W.A., Compilers. Summary of Reservoir Sediment Deposition Surveys Made in the United States Through 1965. U.S. Department of Agriculture Miscellaneous Publication No. 1143, 64 pp., May, 1969. (Cooperative report with the Sedimentation Committee. Water Resources Council).

listed in the summary table. The method used in presenting this information is given on pages F-2, F-3, F-4 and F-5. The supplement has not been distributed with this bulletin because of its bulk and because the detailed information is not of general interest. Copies are available in the offices of the agencies represented on the Sedimentation Committee of the Water Resources Council. Reprints of data sheets for specific reservoirs may be obtained on request from the Director, USDA Sedimentation Laboratory, U.S. Department of Agriculture, Oxford, Miss. 38655. Requests for information not contained in this bulletin or in the supplement should be directed to the agency supplying the data.

The accuracy of the survey data varies greatly. Surveys range from reconnaissance measurements of sediment depth at a few locations to detailed surveys based on closely spaced cross sections or contours. No attempt has been made to classify the surveys according to degree of accuracy.

Information in this bulletin and in the supplement should prove useful to engineers and watershed planning specialists in private and public practice who are concerned with problems of reservoir sedimentation. Engineers, engineering firms and local government agencies who have data on similar reservoir surveys are invited to make this information available to the Sedimentation Committee, WRC, for inclusion in supplements to this publication.

EXPLANATION OF THE SUMMARY TABLE

Data in the summary table of this bulletin were obtained from the reservoir sedimentation survey data sheets contained in the supplement. Dashes in columns of the table signify that data were unavailable or that the column is not applicable for the reservoir.

Reservoirs are grouped according to the 79 drainage areas into which the United States has been divided as shown in the publication, "River Basin Maps Showing Hydrologic Stations," compiled under the auspices of the Subcommittee on Hydrology, Federal Inter-Agency River Basin

Committee.[2] An index map of these drainage areas is shown on page **F-78.** The drainage areas in which the reservoirs are located are shown as subheadings in the summary table. The first of the two numbers identifying a reservoir indicates the drainage basin in which it is located. The second number denotes the particular reservoir in the drainage area and is based upon the order in which the data were prepared. These numbers are the same as those identifying the corresponding survey data sheets in the supplement. When a survey data sheet is revised or when another sheet is prepared with information for additional surveys, the identification number is modified by the addition of letters beginning with a; for example, 13-2, 13-2a, and 13-2b.

Total drainage area includes the reservoir area and the area lying above all upstream dams but generally excludes noncontributing drainage areas lying within the watershed boundary. Where available, the drainage area figure published by the U.S. Geological Survey in Water-Supply Papers is usually used. The net drainage area is the sediment-contributing area and generally excludes the reservoir area and the drainage areas above upstream reservoirs, or other structures which are effective sediment traps.

The first date shown usually corresponds to the beginning of storage when sediment deposition began. However, for some reservoirs the first date represents the date of the contour or range survey made after the reservoir had been in operation for some time.

For most reservoirs, the storage capacity given is the total storage below the level of the crest of an ungated spillway or the top of gates (less gate-height freeboard, if any) of gated spillways. Where capacity values below the spillway crest elevation are given, footnotes are used to explain.

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[2] U.S. Inter-Agency Committee on Water Resources, Subcommittee on Hydrology. River Basin Maps Showing Hydrologic Stations. U.S. Dept. Com., Weather Bur., Notes on Hydrol. Activ. Bul. 11, 79 pp., 1961.

The capacity-average annual inflow ratio (C/I ratio) was derived from the reservoir storage capacity and the average annual inflow. Normally the average annual inflow for the entire period of record was used to compute the C/I ratios. This time period may or may not correspond to the period for which sediment accumulation was given. Generally, the C/I ratio was not given if upstream structures controlled 25 percent or more of the drainage area.

The specific weight of deposited sediment is an average or weighted value for the reservoir, determined generally from samples of deposits. In view of the variations with depth and location within the reservoir, specific weight is generally an approximation for the reservoir. The entry is marked by an asterisk where the specific weight is assumed or is calculated from field data or the size-frequency grading of the deposits.

The average annual rate of sediment accumulation (acre-feet and tons per square mile of net drainage area) pertains to sediment deposited in the reservoir below the full pool elevation. Sediment deposited in deltas above full pool level or sediment discharged from the reservoir is not included unless explained by footnote. For reservoirs with more than one survey and where the latest survey indicated an increase in the specific weight of deposited sediment, the annual sediment accumulation rate in tons per square mile was not always computed in the same manner. For some reservoirs, compaction of earlier sediment was considered and in others it was not. All of the deposited sediment was assumed to have been transported into the reservoir by water.

The agency supplying data is shown in the last column of the table. This agency either has the basic data available or has access to it through cooperative arrangements. The symbols used in this column apply to the following agencies:

ARS - Agricultural Research Service
BR - Bureau of Reclamation
CE - Corps of Engineers
FS - Forest Service
GS - Geological Survey
IWS - Illinois State Water Survey
ODW - Ohio Department Natural Resources--Division of Water
SCS - Soil Conservation Service
TVA - Tennessee Valley Authority

FORM FOR REPORTING RESERVOIR SEDIMENTATION

A completed sample of the reservoir sedimentation data sheet from the supplement is shown on pages **F-79 and F-80.** This sheet is a convenient and standard form for reporting results of reservoir surveys. An invitation is extended to readers, particularly those practicing engineering individually, in engineering firms, or in local government agencies, to prepare sheets covering surveys known to them but not included in this publication. A blank "Reservoir Sedimentation Data" sheet is enclosed as a tear sheet on pages **F-81 and F-82.** Additional data sheets may be obtained from the department offices listed on the title page or the form may be reproduced if desired. The completed forms may be sent to any one of the agencies represented on the Sedimentation Committee for inclusion in supplements to this bulletin.

SUMMARY OF

RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	ST. JOHN MACHIAS, PENOBSCOT, KENNEBEC, ANDROSCOGGIN, AND PRESUMPSCOT RIVER BASIN												
1-1	Little River Res. #2	Little River	Belfast, Me.	13.9	13.8	— 1913	—	456	*0.029	--	—	--	SCS
	do	do	do	—	—	Oct. 1969	56	341	.021	*100	0.15	326	
	HOUSATONIC, CONNECTICUT, THAMES, AND MERRIMACK RIVER BASIN												
2-1	Broad Brook	Broad Brook River	Broad Brook, Conn.	5.13	—	— 1916	—	3,726	—	--	--	—	SCS
	do	do	do	--	—	Sept. 1951	35	3,652	—	*50	.33	398.6	
2-2	Mountain Street	Trib. of Beaver Brook	Greenfield, Mass.	.8	—	— 1905	—	1,076.2	—	—	--	—	SCS
	do	do	do	—	—	Sept. 1951	46	1,056.1	—	*50	.56	609.8	
2-3	Plants Pond	Eightmile Run	Plantsville, Conn.	15.76	--	Nov. 1850	—	105.0	—	--	--	—	SCS
	do	do	do	—	—	Sept. 1951	101	84.8	—	*50	.01	10.9	
2-4	Southington Reservoir	Quinnipiac River	Southington, Conn.	1.08	—	— 1883	—	321.8	—	—	--	—	SCS
	do	do	do	--	—	Sept. 1951	68	314.0	—	*50	.10	108.9	
2-5	Wallingford	Pine River	Wallingford, Conn.	8.98	—	— 1941	--	433.4	—	--	—	—	SCS
	do	do	do	--	—	Sept. 1951	10	430.0	—	*50	.06	63.8	
2-6	West Whately	Avery Brook	West Whately, Mass.	9.0	—	-- 1902	—	76.7	--	—	—	—	SCS
	do	do	do	—	—	Sept. 1951	49	71.2	—	*50	.012	13.07	
2-7	Westfield	Moose Mountain Branch	Westfield, Mass.	2.52	—	— 1874	—	564.6	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1951	77	566.8	--	*50	.096	102.4	
	HUDSON RIVER BASIN AND ST. LAWRENCE DRAINAGE IN NEW YORK												
3-1	Schoharie (Gilboa Dam)	Schoharie Creek	Prattsville, N. Y.	314	312.32	Aug. 1926	—	63,821	—	—	—	--	SCS
	do	do	do	--	—	May 1950	23.8	62,702	--	*60	1/.166	1/217	
3-2	Englishtown Pond	Weamaconk Creek	Englishtown, N. J.	7.2	7.19	— 1755	—	42.3	.005	—	—	--	SCS
	do	do	do	—	—	Oct. 1955	200	13.5	.002	*60	.02	86.24	
3-3	Carnegie Lake	Millstone River	Princeton, N. J.	155	47.8	Dec. 1907	--	1,258	—	—	--	—	SCS
	do	do	do	—	—	Sept. 1950	42.8	934	—	*50	2/.20	217.8	
	do	1 do	do	—	—	— 1959	9.0	3/822	—	—	—	--	
3-4	Wappinger	Wappinger Creek	Wappinger Falls, N. Y.	197	—	— 1900	—	606.4	—	—	--	--	SCS
	do	do	do	—	—	July 1952	52	461.6	—	*50	.01	10.89	
	SUSQUEHANNA AND DELAWARE RIVER BASINS												
4-1a	Loch Raven Reservoir	Gunpowder Falls River	Towson, Md.	303	4/219.4	— 1914	—	5/70,169	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1943	29	5/64,813	—	*60	6/.418	6/808	
	do	do	do	—	—	June 1961	18	64,072	—	57.3	.187	233	
4-2a	Prettyboy	do	Herford, Md.	80	77.5	Apr. 1933	—	60,979	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1943	10.5	5/60,410	—	*60	.499	913	
	do	do	do	—	—	Sept. 1961	18	59,864	—	64.2	.191	347	
4-3	Griffin	Griffin Creek (Leggett)	Scranton, Pa.	3.21	3.04	— 1888	—	1,991	—	—	—	—	SCS
	do	do	do	—	—	May 1941	53	1,953	--	—	.237	--	
4-4	Elmhurst	Roaring Brook	do	36.85	36.55	— 1890	—	3,766	--	—	—	--	SCS
	do	do	do	—	—	May 1941	51	3,686	--	—	.034	—	
4-5	Lake Williams	Codorus Creek	York, Pa.	42.9	42.6	— 1912	—	2,686	—	--	—	—	SCS
	do	do	do	--	—	Apr. 1939	27	2,232	--	49.1	.396	421	
4-6	Williams Bridge	Stafford Meadow Brook	Scranton, Pa.	5.0	4.94	— 1893	—	1,051	—	--	—	—	SCS
	do	do	do	—	—	May 1941	48	1,046	—	—	.022	—	
4-7a	Atkisson Reservoir	Winter's Run	Bel Air, Md.	45.46	45.35	— 1942	--	896.19	.025	--	—	--	SCS
	do	do	do	—	—	— 1954	12	705.32	.019	*60	.351	659	
	do	do	do	—	--	— 1965	11	617.08	.017	--	.177	331	
4-8a	Palto Dam	Dean Creek	Spencer, N. Y.	.41	.41	July 1955	—	56.04	.130	--	—	—	SCS
	do	do	do	—	--	Aug. 1957	2	55.90	.129	*80	.170	296	
	do	do	do	—	—	June 1966	8.9	55.60	.128	*79.2	.083	161	
4-9a	Pylkas Dam	do	do	.71	.71	July 1955	—	187.31	.250	--	--	—	SCS
	do	do	do	--	—	Aug. 1957	2	187.13	.250	*80	.130	226.5	
	do	do	do	--	—	June 1966	8.9	186.70	.249	*80	.068	119	
4-10	Columbia Dam	Paulins Kill River	Columbia, N. J.	171	171	July 1937	--	311.77	—	—	--	--	SCS
	do	do	do	--	—	July 1957	20	244.19	—	*64	.07	28	

4-11	Old Glatfelter	W. Br. Codorus Creek	Spring Grove, Pa.	74.3	—	—	1884	—	147.2	—	—	—	—	SCS
	do	do	do	—	—	Apr.	1939	55	10.0	—	—	.034	—	
4-12	Palington Reservoir	Powder Creek	do	2.91	2.90	—	1937	—	63.0	—	—	—	—	SCS
	do	do	do	—	—	Apr.	1939	1.6	59.9	—	33.2	.669	483	
4-13	Lake Rushford	Caneadea Creek	Caneadea, N. Y.	60.7	—	—	1925	—	28,000	—	—	—	—	SCS
	do	do	do	—	—	Oct.	1951	26	27,426	—	*60	.37	484	
4-14	Icedale	Brandywine W. Br.	Coatesville, Pa.	20.0	—	—	1900	—	137	—	—	—	—	SCS
	do	do	do	—	—	July	1951	51	106	—	*50	.03	33	
4-15	Coatesville	Rock Run	do	5.0	—	—	1916	—	1,019	—	—	—	—	SCS
	do	do	do	—	—	July	1951	35	970	—	*50	.28	305	
4-16	Liberty Reservoir	Patapsco	Wards Chapel, Md.	164	159.1	July	1954	—	138,762.4	1.133	—	—	—	SCS
	do	do	do	—	—	June	1962	7.9	138,227.0	1.129	*60	.426	557	
4-17	Little Deer No. 1	Cattail Branch	Madonna, Md.	.74	.73	June	1958	—	6/23.37	—	—	—	—	SCS
	do	do	do	—	—	Nov.	1962	4.4	6/19.99	—	*60	6/1.055	1,378.7	
4-18	Mount Morris	Genesee River	Mount Morris, N. Y.	1,077	1,011	Nov.	1951	—	338,010	.347	—	—	—	CE
	do	do	do	—	—	May	1957	5.5	336,611	.345	7/—	.25	419	
	do	do	do	—	—	May	1963	5.9	335,393	.344	77	.20	335	
4-19	Patterson Creek #1	Patterson Creek	Endwell, N. Y.	4.3	4.3	Oct.	1968	—	891.40	.229	—	—	—	SCS
	do	do	do	—	—	Oct.	1970	2	887.95	.228	*80	6/.40	6/696	
4-20	Little Choconut #2B	West Branch Little Choconut	Choconut Center, N. Y.	1.64	1.64	Oct.	1968	—	272	.183	—	—	—	SCS
	do	do	do	—	—	Oct.	1970	2	271.38	.182	*80	6/.19	6/331	

POTOMAC, RAPPAHANNOCK, YORK, AND JAMES RIVER BASINS

5-1a	Lake Barcroft	Trib. of Potomac River	Falls Church, Va.	14.5	14.3	Jan.	1915	—	8/1,847	.142	—	—	—	SCS
	do	do	do	—	—	Feb.	1938	23.1	8/1,767	.134	*60	.257	336	
	do	do	do	—	—	Aug.	1957	19.5	9/2,092	.161	—	.728	950	
5-2	Pedlar	Pedlar River	Oronoco, Va.	33.21	33.07	Feb.	1907	—	1,860	—	—	—	—	SCS
	do	do	do	—	—	Feb.	1938	31	1,723	—	—	.134	—	
5-3	Burnt Mills	N. W. Br. Anacostia River	Silver Spring, Md.	27.0	26.97	May	1930	—	161	—	—	—	—	SCS
	do	do	do	—	—	Mar.	1938	7.8	95	—	*60	.408	533	
5-4b	Greenbelt Lake	Trib. of Indian Creek	Greenbelt, Md.	10/.82	.79	July	1936	—	196	*.312	—	—	—	SCS
	do	do	do	—	—	Feb.	1938	1.6	186	*.296	*60	7.91	10,337	
	do	do	do	—	—	Aug.	1957	19.5	151	*.240	*60	2.27	2,970	
	do	do	do	—	—	June	1968	10.8	11/147	.234	*60	1.52	1,985	
5-5a	Staunton	North River	Staunton, Va.	25	25	Dec.	1925	—	385	—	—	—	—	SCS
	do	do	do	—	—	Jan.	1940	14	373	—	—	.234	—	
	do	do	do	—	—	June	1957	17.5	350	—	—	.053	—	
5-6	Jackson	Occoquan Creek	Manassas, Va.	337	336.4	July	1930	—	4,500	—	—	—	—	SCS
	do	do	do	—	—	Aug.	1937	7.2	4,158	—	*60	.141	184	
5-7b	Triadelphia L. (Brighton D.)	Patuxent River	Brighton, Md.	81.4	80.0	Jan.	1942	—	12/20,222	.327	—	—	—	SCS
	do	do	do	—	—	Oct.	1950	8.3	20,089	.324	*50	.20	218	
	do	do	do	—	—	Sept.	1958	7.9	19,633	.317	*50	.72	784	
	do	do	do	—	—	Aug.	1964	5.9	19,065	.300	61.1	1.25	1,663	
5-8	Gordon Lake	Britts Creek	Cumberland, Md.	64	13/4	Sept.	1913	—	3,129	—	—	—	—	SCS
	do	do	do	—	—	Apr.	1940	26.6	3,004	—	—	14/.090	—	
5-9	Thomas W. Koon Lake	do	do	60	59.6	Mar.	1932	—	7,312	—	—	—	—	SCS
	do	do	do	—	—	Apr.	1940	8.1	7,294	—	—	.036	—	
5-10	Savage River Dam	Savage River	Bloomington, Md.	105.0	104.44	Mar.	1952	—	20,300	.172	—	—	—	SCS
	do	do	do	—	—	Mar.	1956	4.0	20,020	.169	*60	.643	840	
5-11	Rocky Gorge	Patuxent River	Laurel, Md.	132.8	50.16	Mar.	1954	—	21,390	—	—	—	—	SCS
	do	do	do	—	—	Aug.	1964	10.4	20,789	—	67	1.15	1,678	
5-12	South River, Site 26	Inch Branch	Waynesboro, Va.	2.7	2.7	May	1956	—	610.4	.28	—	—	—	SCS
	do	do	do	—	—	Nov.	1970	14.5	607.0	.28	*60	.087	110	
5-13	Wilde Lake	Trib. Little Patuxent	Columbia, Md.	1.88	1.85	Sept.	1966	—	186.97	.140	—	—	—	SCS
	do	do	do	—	—	Aug.	1968	1.9	170.99	.122	*60	15/7.39	16/11,270	
	do	do	do	—	—	Aug.	1969	1.0	163.72	.117	*60	3.93	5,133	

CHOWAN, ROANOKE, TAR, NEUSE, AND CAPE FEAR RIVER BASINS

6-1	Lake Apex	Swift Creek	Apex, N. C.	4.0	4.0	—	1925	—	106	—	—	—	—	SCS
	do	do	do	—	—	June	1941	16	94	—	—	.19	—	
6-2	Franklinton	Sallie Keaney Creek	Franklinton, N. C.	1.13	1.12	Jan.	1925	—	34.7	—	—	—	—	SCS
	do	do	do	—	—	May	1938	13.3	27.3	—	67	.509	743	
6-3	Greensboro (L. Brandt)	Reddy Fork	Greensboro, N. C.	74.1	73.4	Feb.	1923	—	2,870	—	—	—	—	SCS
	do	do	do	—	—	Aug.	1934	11.5	2,610	—	*60	.308	402	
6-4	High Point	Deep River	High Point, N. C.	62.8	62.3	Jan.	1928	—	4,394	—	—	—	—	SCS
	do	do	do	—	—	Aug.	1934	6.5	4,135	—	50.6	.541	596	
	do	do	do	—	—	Apr.	1938	3.75	4,038	—	—	.416	458	

1/ Includes estimated 112 acre-feet passing through Shandaken Tunnel.
2/ Includes 103 acre-feet of sediment dredged in 1937-1939.
3/ Partial survey covering segments 1-14 in Stoney Brook Arm Only.
4/ Net sediment contributing area was 299.4 sq. mi. until 1933 when Prettyboy Dam was completed. This area was used in the 1943 calculations.
5/ Revised after 1961 survey.
6/ Conservation or sediment pool only.
7/ Not determined - assumed equal to that determined in 1963.
8/ Based on original spillway crest elevation 205 feet m. s. l.
9/ Based on spillway crest elevation 210 feet m. s. l. and estimated capacity of 2,380 acre-feet resulting from 1942 addition to top of dam.
10/ Revised 1968.
11/ 9 acre-feet gained by dredging.
12/ Revised due to movable control gates.
13/ Koon Lake, upstream, was built in 1932.
14/ Based on total sediment in both Gordon Lake and Koon Lake.
15/ Does not include 4.34 acre-feet dredged.
16/ Includes 4.34 acre-feet dredged in early spring 1968.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
CHOWAN, ROANOKE, TAR, NEUSE, AND CAPE FEAR RIVER BASINS (CONTINUED)													
6-5	Lake Michie	Flat River	Durham, N. C.	167.5	166.7	Apr. 1926	—	12,671	—	—	—	—	SCS
	do	do	do	—	—	Jan. 1935	8.75	12,276	—	—	0.271	—	
6-6	Sanford City	Lick Creek	Sanford, N. C.	3.75	3.73	Feb. 1927	—	103	—	—	—	—	SCS
	do	do	do	—	—	June 1941	14.33	95	—	—	.190	—	
6-7	University Lake	Morgan Creek	Chapel Hill, N. C.	30.6	30.3	June 1932	—	1,915	—	—	—	—	SCS
	do	do	do	—	—	Apr. 1935	2.9	1,851	—	—	.728	—	
6-8	Roxboro City Lake	Satterfield Creek	Roxboro, N. C.	7.62	7.52	Apr. 1924	—	531.2	—	—	—	—	SCS
	do	do	do	—	—	June 1941	17.2	460.3	—	—	.548	—	
	do	do	do	—	—	Nov. 1946	5.4	448.4	—	—	1/.342	—	
6-9	Burlington Municipal	Stony Creek	Burlington, N. C.	105.2	105.0	June 1928	—	1,480	—	—	—	—	SCS
	do	do	do	—	—	May 1938	10.0	1,325	—	63	.135	213	
	do	do	do	—	—	Sept. 1949	11.3	1,202	—	—	.104	143	
6-10a	Walnut Cove	Dan [illegible]ver	Walnut Cove, N. C.	397	397	— 1924	—	976	.002	—	—	—	CE
	do	do	do	—	—	Apr. 1932	2/9	209	.001	4/43	.214	200	
6-11	John H. Kerr	Roanoke River	South Hill, Va.	7,800	7,391	July 1952	—	2,808,400	.496	—	—	—	CE
	do	do	do	—	—	Dec. 1959	7.4	2,790,349	.484	32.6	1.06	736	
6-12	Philpott	Smith River	Bassett, Va.	212	185.7	Dec. 1951	—	201,500	.966	—	—	—	CE
	do	do	do	—	—	Nov. 1960	8.9	198,000	.949	46.2	2.08	2,103	
PEE DEE, SANTEE, AND EDISTO RIVER BASINS													
7-1	Chester	Sandy River	Chester, S. C.	16.05	15.92	Nov. 1926	—	682	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1937	11	585	—	—	.55	—	
7-2	Lancaster	Turkey Quarter Creek	Lancaster, S. C.	9.40	9.34	Feb. 1925	—	262	—	—	—	—	SCS
	do	do	do	—	—	June 1938	13.4	190	—	65.3	.417	593	
7-3a	Spartanburg Municipal	South Pacolet River	Fingerville, S. C.	91.33	90.8	May 1926	—	1/3,326	—	—	—	—	SCS
	do	do	do	—	—	July 1934	8.2	1/3,199	—	—	1/.432	—	
	do	do	do	—	—	Mar. 1947	12.7	1/2,698	—	—	1/.258	—	
	do	do	do	—	—	Oct. 1965	18.6	1/2,993	—	—	1/.176	—	
	do	do	do	—	—	Oct. 1965	18.6	3/3,109	—	—	—	—	
7-4	Appalachia	South Tyger River	Greer, S. C.	63.0	62.8	— 1906	—	2,500	—	—	—	—	SCS
	do	do	do	—	—	July 1936	30	1,600	—	—	.48	—	
7-5	Albemarle City Lake	Long Creek	Albemarle, N. C.	33.0	32.5	Feb. 1924	—	1,070	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1939	15.5	918	—	—	.302	—	
7-6	Cannon Lake	Buffalo Creek	Kannapolis, N. C.	19.0	17.[illegible]	July 1939	—	2,600	—	—	—	—	SCS
	do	do	do	—	—	June 1941	1.9	2,576	—	—	.774	—	
7-7	Lake Concord	Chambers & Rose Branch	do	4.7	4.54	Mar. 1925	—	1,201	—	—	—	—	SCS
	do	do	do	—	—	May 1935	10.2	1,122	—	—	1.71	—	
7-8	Entwhistle No. 3	Hitchcock Creek	Roberdell, N. C.	168.0	5/18.0	— 1892	—	186	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1940	48.0	163	—	—	.034	—	
7-9	Bury	Little River	Troy, N. C.	269	269	— 1915	—	1,106	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1940	25.0	976	—	—	.019	—	
7-10	High Rock	Yadkin River	Salisbury, N. C.	3,930	3,863	Nov. 1927	—	289,432	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1935	7.8	275,516	—	—	.462	—	
7-11	Lake Lee	Richardson Creek	Monroe, N. C.	50.50	50.34	Apr. 1927	—	821	—	—	—	—	SCS
	do	do	do	—	—	June 1938	11.1	652	—	61.8	.302	406	
7-12	Pee Dee Mfg. Co.	Hitchcock Creek	Rockingham, N. C.	176	5/25	— 1874	—	464	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1940	66	404	—	—	.036	—	
7-13	Salem	Salem Creek	Winston-Salem, N. C.	27.68	27.26	Nov. 1919	—	3,099	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1939	19.8	2,860	—	38.0	.444	367	
7-14	Norwood L. (Tillery)	Pee Dee River	Mt. Gilead, N. C.	4,600	6/431	July 1928	—	136,823	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1940	11.75	133,300	—	—	.696	—	
7-15	Lexington	Leonards Creek	Lexington, N. C.	6.75	6.66	Aug. 1935	—	462	—	—	—	—	SCS
	do	do	do	—	—	Apr. 1940	4.6	441	—	45.5	.692	605	
	do	do	do	—	—	May 1951	11.1	419	—	*45.5	.299	298	
7-16	Third Creek Site No. 7	Third Creek	Statesville, N. C.	4.84	4.74	Sept. 1957	—	961.4	.186	—	—	—	SCS
	do	do	do	—	—	Mar. 1962	4.5	948.5	.184	7/62.2	.61	826	
	do	do	do	—	—	Mar. 1965	3.0	945.9	.183	7/62.2	.18	244	
	do	do	do	—	—	Apr. 1969	4.1	943.1	.183	7/62.2	.14	190	

			SAVANNAH, OGEECHEE, AND ALTAMAHA RIVER BASINS											
8-1	Lake Issaqueena	Six Mile Creek	Clemson, S. C.	14.03	8/13.84	June	1938	—	1,836	—	—	—	—	[illegible]
	do	do	do	—	9/13.86	Apr.	1941	2.9	1,760	—	49.82	2.28	2,440	
	do	do	do	—	—	Oct.	1949	8.5	1,626	—	50.9	1.05	1,160	
8-2	Lloyd Shoals	Ocmulgee River	Jackson, Ga.	1,414	1,407	Dec.	1910	—	112,538	—	—	—	—	[illegible]
	do	do	do	—	—	Mar.	1935	24.3	98,578	—	80	.460	533	
8-3a	North Fork Broad No. 2	Dumnan's Creek	Toccoa, Ga.	.96	.94	Jan.	1956	—	10/198	.161	—	—	—	[illegible]
	do	do	do	—	—	June	1959	3.4	196.2	.179	33.1	.363	698	
	do	do	do	—	—	Apr.	1970	10.8	192.8	.176	33.1	.335	460	
8-4a	North Fork Broad No. 6	Bear Creek	Mize, Ga.	3.62	3.50	July	1956	—	10/780.9	.199	—	—	—	[illegible]
	do	do	do	—	—	June	1959	2.92	770.6	.197	74.0	1.01	1,445	
	do	do	do	—	—	Apr.	1970	10.8	751.55	.192	74.0	.50	814	
8-5a	North Fork Broad No. 11	Tom's Creek	Eastanollee, Ga.	3.79	3.67	July	1956	—	10/788.4	.193	—	—	—	[illegible]
	do	do	do	—	—	June	1959	2.9	777.6	.190	73.0	1.39	2,216	
	do	do	do	—	—	Apr.	1970	10.9	763.9	.186	73.0	.34	547	
8-6	North Fork Broad No. 1	North Fork Broad River	Toccoa, Ga.	3.75	3.70	June	1958	—	633.2	.168	—	—	—	[illegible]
	do	do	do	—	—	Apr.	1970	11.9	626.16	.166	63.2	.209	282	
8-7	North Fork Broad No. 14	Tom's Creek	do	1.2	1.191	Oct.	1954	—	288.1	—	—	—	—	[illegible]
	do	do	do	—	—	Mar.	1962	7.4	276.8	—	11/68.6	.49	732	
	do	do	do	—	—	Nov.	1964	2.7	272.0	—	—	1.49	—	
	do	do	do	—	—	Apr.	1969	4.5	267.0	—	12/66.2	.93	1,341	
			SATILLA, ST. MARYS, ST. JOHNS, AND SUWANNEE RIVER BASINS											
9-														
			SOUTHERN FLORIDA DRAINAGE											
10-														
			APALACHICOLA AND OCHLOCKONEE RIVER BASINS											
11-1	Newnan	Bolton Mill Creek	Newnan, Ga.	1.39	1.34	June	1924	—	384	—	—	—	—	[illegible]
	do	do	do	—	—	Nov.	1937	13.4	358	—	*50	1.45	1,580	
	do	do	do	—	—	Feb.	1945	7.3	354	—	—	.41	446	
11-2	Sky Lake	Trib. of Chickamauga Creek	Helen, Ga.	2.34	2.31	June	1925	—	218.4	—	—	—	—	[illegible]
	do	do	do	—	—	May	1956	31	176.4	—	67	.59	866	
11-3	Sautee Creek Site #13	Dean Creek	Cleveland, Ga.	2.9	2.8	Dec.	1959	—	634.8	.114	—	—	—	[illegible]
	do	do	do	—	—	Nov.	1970	10.9	533.2	.095	75.0	3.92	6,470	
			CHOCTAWHATCHEE, YELLOW, ESCAMBIA, AND ALABAMA RIVER BASINS											
12-1	Sequoyah	Small Branches	Jasper, Ga.	1.60	1.51	July	1929	—	890	—	—	—	—	[illegible]
	do	do	do	—	—	July	1939	10.0	865	—	—	1.66	—	
12-2	White Manganese No. 6	Pettit Creek	Cartersville, Ga.	12.46	13/11.0	Oct.	1929	—	1,022	—	—	—	—	[illegible]
	do	do	do	—	—	Nov.	1938	9.2	920	—	63.7	1.20	1,660	
12-3	Lake Auburn	Town Creek (Trib. of)	Auburn, Ala.	1.6	1.6	Feb.	1932	—	102	—	—	—	—	[illegible]
	do	do	do	—	—	June	1937	6.3	95	—	—	.66	—	
12-4	Lay	Coosa River	Clanton, Ala.	9,087	9,076.5	Dec.	1913	—	156,525	.044	—	—	—	[illegible]
	do	do	do	—	—	May	1936	22.3	138,520	.032	—	.089	—	
12-5	Lake Purdy	Little Cahaba River	Birmingham, Ala.	41.76	40.22	Sept.	1910	—	19,080	—	—	—	—	[illegible]
	do	do	do	—	—	Nov.	1935	25.2	18,596	—	—	.479	—	
12-6	Carroll Lake	Curtis Creek	Carrollton, Ga.	7.45	7.18	Oct.	1948	—	1,440.0	.180	—	—	—	[illegible]
	do	do	do	—	—	May	1957	8.5	1,325.4	.167	62.5	2.0	1,031	
12-7	Temple Reservoir	Webster Branch	Temple, Ga.	.63	.61	June	1934	—	65.5	.097	—	—	—	[illegible]
	do	do	do	—	—	May	1937	3	60.5	.090	44.2	2.76	2,620	
12-8	High Pine Dam No. 5	Trib. of High Pine	Roanoke, Ala.	1.8	1.55	Mar.	1961	—	399.7	*.163	—	—	—	
	do	do	do	—	—	May	1970	9.17	395.3	*.161	14/33.99	.32	376.3	[illegible]
			TOMBIGBEE, PASCAGOULA, AND PEARL RIVER BASINS											
13-1	Bayview	Village Creek	Birmingham, Ala.	72.3	71.6	May	1911	—	11,864	—	—	—	—	[illegible]
	do	do	do	—	—	Dec.	1935	24.6	9,514	—	—	1.36	—	
13-2a	Lake Harris	Yellow Creek	Tuscaloosa, Ala.	30.0	29.8	Feb.	1929	—	2,421	.061	—	—	—	[illegible]
	do	do	do	—	—	Nov.	1935	6.75	2,373	.059	—	.239	—	
	do	do	do	—	—	Aug.	1953	17.75	15/2,436	.086	59.9	.110	144	
13-3	H. C. Crain Farm Pond #2	Bogue Lusa Creek	Bogalusa, La.	.13	.13	Aug.	1949	—	7.431	.044	—	—	—	[illegible]
	do	do	do	—	—	May	1963	13.5	6.963	.040	—	.377	—	
			LOWER MISSISSIPPI RIVER BASIN (NATCHEZ TO THE MOUTH) Calcasieu, Mermentau, and Vermilion River Basins											
14-														

1/ Excluding 2.04 acre-feet of sediment dredged from lake in March 1942.
2/ Assumes storage depletion occurred in 9 years, see H. D. 65, 75th Congress, 1st. session ("308" report).
3/ Elevation of dam raised from 775.0 to 777.1 feet Sept. 1956. Data based on original elevation of 775.0 feet and original capacity of 3506 ac.-ft.
4/ Present storage capacity at elevation 777.1 feet.
5/ Ledbetters' dam upstream
6/ Narrows upstream
7/ Average of 39 samples collected in 1962.
8/ In 1940
9/ In 1949
10/ Changed on basis of 1970 survey.
11/ Average of 9 samples.
12/ Average of 10 samples.
13/ Drainage area above reservoir No. 3 excluded.
14/ Weighted average: Submerged sediment 51.75 pcf- aerated assumed 83 pcf.
15/ With 5-foot flashboards added in 1947.
* Estimated or assumed.

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SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

LOWER MISSISSIPPI RIVER BASINS (HELENA TO NATCHEZ)
Yazoo, Big Black, and Ouachita River Basins

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
15-1	Lake Hamilton	Ouachita River	Hot Springs, Ark.	1,421	1,413.4	Dec. 1930	--	156,345	--	--	--	--	SCS
	do	do	do	--	--	May 1950	19.4	153,279	--	*50	0.11	120	
15-2	Lake Winona	Alum Fork Saline River	Little Rock, Ark.	43.0	41.3	Oct. 1937	--	34,533	--	--	--	--	SCS
	do	do	do	--	--	May 1950	12.6	34,340	--	*50	.37	403	
15-3	O. P. White Pond	Trib. of Chewalla Creek	Holly Springs, Miss.	.0097	.0089	Oct. 1947	--	1.46	--	--	--	--	SCS
	do	do	do	--	--	Jan. 1951	3.3	1.07	--	63.65	13.1	18,200	
15-4	B. H. Hennesouker Pond	Trib. of Coldwater River	Slayden, Miss.	.0625	.0597	Jan. 1947	--	12.0	--	--	--	--	SCS
	do	do	do	--	--	Jan. 1951	4.0	8.35	--	60.09	15.3	20,000	
15-5	C. S. Hurdle Pond	do	do	.244	.234	Dec. 1946	--	36.4	--	--	--	--	SCS
	do	do	do	--	--	Jan. 1951	4.1	29.0	--	62.9	7.78	10,700	
15-6	Agnes Jones Pond	Trib. of Coldwater River	Holly Springs, Miss.	.0478	.0451	Oct. 1946	--	8.80	--	--	--	--	SCS
	do	do	do	--	--	Jan. 1951	4.3	6.40	--	67.27	12.4	18,200	
15-7	Lee Johnson Pond	Trib. of Red Banks Creek	do	.0833	.0784	Sept. 1948	--	17.8	--	--	--	--	SCS
	do	do	do	--	--	Jan. 1951	2.3	14.8	--	76.13	16.6	27,500	
15-8	P. T. McAlexander	Trib. of Coldwater River	do	.0139	.0128	Aug. 1942	--	2.46	--	--	--	--	SCS
	do	do	do	--	--	Jan. 1951	8.5	1.11	--	84.24	12.4	22,800	
15-9	Lake Shahkoka	Trib. of Camp Creek	Olive Branch, Miss.	.4153	.3663	Jan. 1934	--	306	--	--	--	--	SCS
	do	do	do	--	--	Feb. 1951	17.0	256	--	61.65	8.03	10,800	
15-10	Lake Woodland	do	do	.5045	.4797	Feb. 1945	--	96	--	--	--	--	SCS
	do	do	do	--	--	Feb. 1951	6.0	78.1	--	39.9	5.52	4,800	
15-11	C. L. Patton Pond	Trib. of Red Banks Creek	Warsaw, Miss.	.1019	.0954	Feb. 1942	--	15.9	--	--	--	--	SCS
	do	do	do	--	--	Feb. 1951	9.0	12.1	--	66.8	4.48	6,520	
15-12	G. B. Langston, Jr., Pond	Trib. of Red Banks Creek	Warsaw, Miss.	.0156	.0116	Feb. 1916	--	12.3	--	--	--	--	SCS
	do	do	do	--	--	Feb. 1951	35.0	9.66	--	63.3	6.55	9,040	
15-13	Fletcher Hurdle Pond (North)	Trib. of Byhalia Creek	Victoria, Miss.	.0406	.0389	Feb. 1947	--	4.61	--	--	--	--	SCS
	do	do	do	--	--	Feb. 1951	4.0	2.67	--	63.0	12.5	17,100	
15-14	Fletcher Hurdle Pond (South)	do	do	.0297	.0279	Feb. 1947	--	5.48	--	--	--	--	SCS
	do	do	do	--	--	Feb. 1951	4.0	3.61	--	83.1	16.8	30,400	
15-15	C. C. Stevenson Pond	Trib. of Cuffawa Creek	Holly Springs, Miss.	.0342	.0320	Aug. 1948	--	6.47	--	--	--	--	SCS
	do	do	do	--	--	Feb. 1951	2.7	4.23	--	78.8	26.0	44,600	
15-16	Gayoso Lake	Trib. of Mississippi River	Horn Lake, Miss.	.2196	.2047	Feb. 1942	--	58.7	--	--	--	--	SCS
	do	do	do	--	--	Feb. 1951	9.0	53.0	--	51.85	3.13	3,530	
15-17	Ben O. Pettis Pond	Trib. of Toby Tubby Creek	Oxford, Miss.	.0075	.0067	Feb. 1916	--	1.63	--	--	--	--	SCS
	do	do	do	--	--	Feb. 1951	35.0	1.07	--	58.72	2.39	3,060	
15-18	C. D. Williams Pond	Trib. of Hudson Creek	do	.0450	.0416	Mar. 1928	--	9.93	--	--	--	--	SCS
	do	do	do	--	--	Mar. 1951	23.0	6.70	--	55.72	3.35	4,070	
15-19	R. I. Williams	Trib. of Yocona River	Taylor, Miss.	.0239	.0210	Sept. 1946	--	4.48	--	--	--	--	SCS
	do	do	do	--	--	Mar. 1951	4.5	2.54	--	47.74	20.5	21,300	
15-20	Henry W. Ramsey Pond	Trib. of Sarter Creek	Oxford, Miss.	.1375	.1289	Jan. 1933	--	31.0	--	--	--	--	SCS
	do	do	do	--	--	Mar. 1951	18.2	24.9	--	41.75	2.61	2,370	
15-21	Dr. Bramlett Pond	Trib. of Pumpkin Creek	do	.8672	.8131	Jan. 1937	--	227	--	--	--	--	SCS
	do	do	do	--	--	Mar. 1951	14.2	214	--	*37	1.12	913	
15-22	A. S. Kyle Pond	Trib. of Tallahatchie R.	Batesville, Miss.	.0456	.0398	Mar. 1945	--	17.4	--	--	--	--	SCS
	do	do	do	--	--	Mar. 1951	6.0	16.6	--	52.04	3.14	3,560	
15-23	Ben P. Smith Pond	Trib. of Pigeon Roost Cr.	Holly Springs, Miss.	.0278	.0264	July 1947	--	3.77	--	--	--	--	SCS
	do	do	do	--	--	Mar. 1951	3.7	3.29	--	67.58	4.89	7,200	
15-24	A. L. Rodman Pond	Trib. of Arkabutla Creek	Arkabutla, Miss.	.1563	.1458	Sept. 1945	--	30.5	--	--	--	--	SCS
	do	do	do	--	--	Mar. 1951	5.5	29.0	--	*50	1.95	2,120	
15-25	Charles Dockery Pond	Trib. of Hurricane Creek	Eudora, Miss.	.0644	.0566	Jan. 1946	--	23.0	--	--	--	--	SCS
	do	do	do	--	--	Mar. 1951	5.2	22.0	--	*44	3.60	3,420	
15-26b	Arkabutla Reservoir	Coldwater River	Arkabutla, Miss.	1,000	948	Apr. 1939	--	525,300	.499	--	--	--	CE
	do	do	do	--	--	Dec. 1947	6.33	521,540	.495	*60	.627	819	
	do	do	do	--	--	May 1962	14.42	513,060	.487	*60	.620	810	
15-27a	W. W. Murphy Pond	Trib. of Jones Creek	Holly Springs, Miss.	.208	.200	Nov. 1953	--	1/22.68	*.194	--	--	--	ARS
	do	do	do	--	--	May 1956	2.5	19.72	*.169	*90	2/8.4	2/16,465.7	
	do	do	do	--	--	Sept. 1959	3.3	17.84	*.152	*90	2/3.8	2/7,448.8	
	do	do	do	--	--	Nov. 1963	4.2	15.77	*.135	*90	2/3.5	2/6,860.7	
15-28a	Powerline Dam	East Goose Creek	Oxford, Miss.	.486	.477	Apr. 1953	--	1/30.54	--	--	--	--	ARS
	do	do	do	--	--	May 1955	2.1	26.26	--	66	2/5.66	2/8,136.1	
	do	do	do	--	--	Oct. 1958	3.4	21.34	--	70	2/5.87	2/8,949.4	
	do	do	do	--	--	June 1960	1.66	20.07	--	70	2/5.30	2/8,080.4	
	do	do	do	--	--	Aug. 1962	2.15	19.40	--	*70	2/1.38	2/2,103.9	

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15-29a	Andrew Smith Pond	Trib. of Janes Creek	Holly Springs, Miss.	.327	.300	Nov.	1953	—	1/22.72	*.123	—	—	—	ARS
	----do----	----do----	----do----	—	—	May	1956	2.5	18.83	*.102	*90	2/6.2	2/12,153.2	
	----do----	----do----	----do----	—	—	Sept.	1959	3.3	17.77	*.096	*90	2/2.07	2/4,057.6	
	----do----	----do----	----do----	—	—	Nov.	1963	4.1	16.47	*.089	*90	2/1.87	2/3,665.6	
15-30a	Sardis Reservoir	Little Tallahatchie River	Sardis, Miss.	1,545	1,454	Mar.	1937	—	1,569,900	.934	—	—	—	CE
	----do----	----do----	----do----	—	—	May	1960	20.6	1,549,336	.922	*60	.687	898	
15-31	Enid Reservoir	Yocona River	Enid, Miss.	560	516	—	1940	—	660,030	1.073	—	—	—	CE
	----do----	----do----	----do----	—	—	—	1951 3/	—	—	—	—	—	—	
	----do----	----do----	----do----	—	—	May	1961	9.83	657,201	1.068	*60	.558	729	
15-32	Grenada Reservoir	Yalobusha River	Grenada, Miss.	1,320	1,219	—	1942	—	1,337,400	.969	—	—	—	CE
	----do----	----do----	----do----	—	—	July	1953 4/	—	—	—	—	—	—	
	----do----	----do----	----do----	—	—	May	1965	11.43	1,320,020	.957	*60	1.205	1,575	

LOWER MISSISSIPPI RIVER BASIN (CHESTER TO HELENA)
St. Francis River Basin

16-1	Grisham	Lost Creek	Bismark, Mo.	.46	.45	Oct.	1930	—	24.05	*.077	—	—	—	SCS
	----do----	----do----	----do----	—	—	July	1939	8.8	19.56	*.063	75.4	1.133	1,860	
16-2	Mountain Lake	Trib. of Rings Creek	Patterson, Mo.	1.90	1.87	—	1927	—	87.7	—	—	—	—	SCS
	----do----	----do----	----do----	—	—	July	1939	12	82.9	—	54.8	.213	254	
16-3	Shepherd Mountain	Trib. of Stouts Creek	Ironton, Mo.	3.99	3.96	—	1929	—	171	—	—	—	—	SCS
	----do----	----do----	----do----	—	—	July	1939	10	158	—	64	.338	471	
16-4	Loch Mary	Brown Creek	Earlington, Ky.	3.81	3.65	—	1888	—	1,228	—	—	—	—	SCS
	----do----	----do----	----do----	—	—	Dec.	1908	20	1,184	—	*60	.600	784	
16-5	Carbondale	Piles Fork	Carbondale, Ill.	3.00	2.77	Aug.	1926	—	1,386	—	—	—	—	IWS
	----do----	----do----	----do----	—	—	Sept.	1948	22.1	1,193	—	73.9	3.15	5,070	
16-6	Bering Coal Co. Pond	Trib. of Wolf Creek	Eldorado, Ill.	.219	.206	—	1919	—	89.3	—	—	—	—	IWS
	----do----	----do----	----do----	—	—	Oct.	1949	30	73.0	—	*76	2.64	4,370	
16-7	Eldorado	Wolf Creek	----do----	2.23	1.87	Oct.	1920	—	844.4	—	—	—	—	IWS
	----do----	----do----	----do----	—	—	Oct.	1949	29	726.0	—	*67	2.18	3,180	
16-8	West Frankfort	Tilley Creek	West Frankfort, Ill.	4.03	3.75	Aug.	1926	—	5/1,608.4	—	—	—	—	IWS
	----do----	----do----	----do----	—	—	Sept.	1936	10.1	1,515.0	—	—	2.46	—	
	----do----	----do----	----do----	—	—	July	1949	12.8	1,487.8	—	—	6/.993	—	
16-9	Pineview (Lower)	South Fork Jonses Creek	Farmington, Mo.	.63	.07	—	1932	—	8.9	—	—	—	—	SCS
	----do----	----do----	----do----	—	—	—	1939	7	8.2	—	*60	1.43	1,870	
16-10	Pineview (Middle)	----do----	----do----	.56	.06	—	1930	—	30.9	—	—	—	—	SCS
	----do----	----do----	----do----	—	—	—	1939	9	29.1	—	*60	3.3	4,310	
16-11	Pineview (Upper)	----do----	----do----	.49	.48	—	1928	—	8.2	*.025	—	—	—	SCS
	----do----	----do----	----do----	—	—	—	1938 7/	10	5.4	*.016	*65	.583	825	
16-12	Killarney	Big Creek	Annapolis, Mo.	51	51	—	1910	—	818	—	—	—	—	SCS
	----do----	----do----	----do----	—	—	—	1939	29	622	—	*60	.133	174	
16-13a	Wappapello	St. Francis River	Poplar Bluff, Mo.	1,310	1,206	July	1940 8/	—	625,000	.540	—	—	—	CE
	----do----	----do----	----do----	—	—	July	1947	7.0	624,651	.539	—	9/.0414	—	
	----do----	----do----	----do----	—	—	Mar.	1964	16.7	613,161	.530	—	.5705	—	
16-14a	Lake Miller	Casey Fork	Mt. Vernon, Ill.	4.65	4.43	Feb.	1944	—	1,766	.613	—	—	—	IWS
	----do----	----do----	----do----	—	—	June	1960	16.3	1,699	.582	34.0	1.20	888	
16-15	Flucks Lake	Unnamed	Marion, Ill.	.339	.316	—	1919	—	58.1	.265	—	—	—	IWS
	----do----	----do----	----do----	—	—	—	1951	32	46.8	.214	56.6	1.11	1,368	
16-16	Baker's Lake	----do----	----do----	.26	.25	—	1937	—	24.0	.143	—	—	—	IWS
	----do----	----do----	----do----	—	—	Aug.	1951	14	21.7	.129	36.8	.64	512	
16-17	Crab Orchard Lake	Crab Orchard Creek	Carbondale, Ill.	171	160	May	1940	—	67,320	.611	—	—	—	IWS
	----do----	----do----	----do----	—	—	July	1951	11.2	63,896	.580	47.5	1.91	1,976	
16-18	Marion	Limb Branch	Marion, Ill.	6.5	6.31	—	1921	—	705	.168	—	—	—	IWS
	----do----	----do----	----do----	—	—	July	1951	30	590	.141	34.5	.61	458	
16-19	Little Grassy Lake	Little Grassy	Carbondale, Ill.	15.7	14.2	Mar.	1942	—	25,741	2.543	—	—	—	IWS
	----do----	----do----	----do----	—	—	July	1951	9.3	25,365	2.506	38.7	2.85	2,402	
16-20	Herrin Reservoir No. 1	Unnamed	Herrin, Ill.	1.78	1.70	—	1913	—	199	.173	—	—	—	IWS
	----do----	----do----	----do----	—	—	—	1951	38	178	.155	27.5	.32	192	
16-21	Knights of Pythias Lake	----do----	Marion, Ill.	.33	.32	Dec.	1925	—	74.6	.350	—	—	—	IWS
	----do----	----do----	----do----	—	—	Aug.	1951	25.7	64.7	.306	62.9	1.22	1,671	
16-22a	Lake Ashley	Trib. of Muddy River	Ashley, Ill.	1.24	1.22	—	1941	—	150	.201	—	—	—	IWS
	----do----	----do----	----do----	—	—	Aug.	1954	14	138	.184	44.5	.69	692	
16-23	Christopher	Trib. of King Creek	Christopher, Ill.	.925	.858	—	1925	—	383.94	.598	—	—	—	IWS
	----do----	----do----	----do----	—	—	July	1960	35	353.59	.551	37.1	1.01	816.1	

1/ Sediment or conservation pool only.
2/ Includes sediment within original flow line of reservoir and above conservation pool.
3/ Original sediment range surveys.
4/ Used as beginning date of sediment deposits.
5/ Spillway crest raised from 439 to 441.77 ft. m.s.l. in April 1943. All data computed on basis of 441.77 ft. at spillway elevation.
6/ Net sediment volume in 1949 was 120.5 ac.-ft. due to compaction of earlier deposits.
7/ Dam failed spring 1938, survey conducted July 24, 1939.
8/ Original data from topographic survey of 1935-36.
9/ Based on incomplete resurvey; 1963 value of 0.57 is more reliable.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE -FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	LOWER MISSISSIPPI RIVER BASIN (CHESTER TO HELENA) St. Francis River Basin (Continued)												
16-24	Lake DuQuoin	Reese Creek	DuQuoin, Ill.	10.73	10.35	— 1937	—	2,003	.316	—	—	—	IWS
	do	do	do	--	—	July 1957	20	1,870	.295	38.3	0.64	534	
16-25	W. F. Farrell	Trib. of Harper Creek	Mt. Vernon, Ill.	.519	.512	— 1945	—	35.56	.103	--	—	—	IWS
	do	do	do	--	--	June 1960	15	27.41	.079	51.5	1.06	1,189	
16-26a	ICRR at Thompsonville	Trib. of Ewing Creek	Thompsonville, Ill.	1.799	1.725	-- 1926	—	352.44	.283	—	—	—	IWS
	do	do	do	--	—	Aug. 1960	34	300.63	.241	48.7	.880	934	
16-27	Lake Johnston City	Lake Creek	Johnston City, Ill.	3.85	3.75	— 1922	—	471	.195	—	—	--	IWS
	do	do	do	--	--	Aug. 1957	35	394	.163	48.3	.59	620	
16-28	Valier Outing Club	Andy Creek	Valier, Ill.	2.47	2.37	— 1922	—	369	.208	—	--	—	IWS
	do	do	do	--	—	Aug. 1957	35	320	.180	41.17	.59	530	
16-29	West Frankfort (New)	Stevens Creek	West Frankfort, Ill.	7.622	7.288	-- 1945	—	2,654.7	.502	—	--	—	IWS
	do	do	do	--	--	July 1960	15	2,390.9	.453	35.9	2.41	1,884.4	
16-30	Lake Reel-Em-In (Walker Lake)	Unnamed	Dixon, Ky.	2.05	1.96	— 1948	—	659.0	.378	--	--	—	SCS
	do	do	do	—	—	May 1964	16	515.4	.296	*65	4.6	6,512.2	
16-31	Rough River FRS No. 1	Buffalo Creek	Kingswood, Ky.	2.86	2.85	Nov. 1955	—	617	.238	—	—	--	SCS
	do	do	do	--	--	June 1970	14.64	596.12	.230	56.13	1/.50	1/611	
16-32	Obion Creek FRS #24	Unnamed Trib. Little Creek	Fancy Farm, Ky.	.37	.36	Nov. 1960	—	1/30.35	*.23	—	—	—	SCS
	do	do	do	—	—	Nov. 1965	5	1/28.80	*.22	*80	1/.86	1/1,498	
16-33	Mud River FRS No. 14	Antioch Creek	Sharon Grove, Ky.	8.59	8.56	Jan. 1964	—	1,379.87	.15	—	—	--	SCS
	do	do	do	—	—	May 1970	6.33	1,355.49	.15	75.78	1/.45	1/762	
16-34	Caney Creek MPS #2	Bennett Fork	Caneyville, Ky.	5.77	5.65	Nov. 1965	--	—	--	--	--	--	SCS
	do	do	do	--	--	May 1970	4.5	1,355.4	.33	77.75	1/1.02	1/1,710	
16-35	Big Reedy FRS #9	West Fork	Reedyville, Ky.	6.76	6.69	June 1964	—	998	.154	—	--	--	SCS
	do	do	do	—	—	Apr. 1970	5.9	976.95	.150	77.58	1/.54	1/912.4	
	OHIO RIVER BASIN (MADISON TO UNIONTOWN) Wabash River Basin												
17-1	Huntingburg (Upper)	Trib. of Patoka River	Huntingburg, Ind.	.67	.63	July 1894	--	137	*.264	--	—	—	SCS
	do	do	do	--	—	Oct. 1940	46.3	119	*.229	*40	.617	538	
17-2a	Oakland City #2	S. Fork Patoka River	Oakland City, Ind.	.52	.40	— 1921	—	2/850.8	*2.116	—	--	—	SCS
	do	do	do	--	--	Sept. 1940	19.0	2/835.8	*2.079	*40	1.937	1,720	
	do	do	do	—	--	Aug. 1965	24.9	811.0	*2.017	70	2.490	3,796	
17-3	Shafer Lake	Tippecanoe River	Monticello, Ind.	1,700	1,698	June 1923	—	14,722	*.016	—	—	--	SCS
	do	do	do	--	—	Aug. 1940	17.2	14,041	*.016	*75	.023	38	
17-4	Spring Mill	Mill Creek	Mitchell, Ind.	15.03	3/5.29	Oct. 1938	—	178	--	--	—	—	SCS
	do	do	do	--	—	Sept. 1948	9.9	127	—	*67	.975	1,420	
17-5	Greendale Lake	Connor's Branch	Xenia, Ill.	25.1	25.0	Aug. 1927	—	306	*.023	—	—	—	SCS
	do	do	do	--	—	Sept. 1940	13.1	260	*.020	*70	.160	213	
17-6	Ridge Lake	Trib. of Embarrass River	Charleston, Ill.	1.41	1.38	Apr. 1941	--	187.4	--	--	—	--	IWS
	do	do	do	--	—	Sept. 1947	6.4	171.9	—	72.4	1.75	2,760	
17-7	Vermilion Lake	N. Fork Vermilion River	Danville, Ill.	267	266	June 1925	--	4/8,643	*.061	—	—	—	SCS
	do	do	do	--	—	Oct. 1940	25.3	7,438	*.052	*70	.179	273	
17-8	Brown Park Lake	Trib. of Raccoon Creek	Flora, Ill.	1.34	1.33	— 1938	--	49.08	.057	—	--	--	IWS
	do	do	do	--	—	June 1959	21	37.75	.044	58.6	.40	510.5	
17-9	Craig & Davidson's Lake	do	Martinsville, Ill.	.465	.427	— 1947	—	187.75	.631	—	--	—	IWS
	do	do	do	—	--	June 1959	12	175.18	.588	33.14	2.46	1,775.6	
17-10	Farina Lake	None	Laclede, Ill.	.538	.531	-- 1928	—	16.4	.097	—	--	--	IWS
	do	do	do	--	—	Aug. 1958	30	13.3	.046	61.94	.19	256.35	
17-11	Graham Lake	Trib. of Veale Creek	Washington, Ind.	.34	.31	Aug. 1950	--	104.8	—	—	--	--	SCS
	do	do	do	--	--	Aug. 1956	6	104.4	—	—	.218	--	
17-12a	ICRR at Bluford	Fourmile Creek	Bluford, Ill.	3.353	3.199	— 1926	—	670.7	.300	--	--	—	IWS
	do	do	do	--	—	June 1960	34	609.70	.273	63.5	.365	493	
17-13	Jones Pond	Trib. of Flat Creek	Otwell, Ind.	.034	.031	Oct. 1954	—	10.7	—	—	--	--	SCS
	do	do	do	--	—	Apr. 1956	1.5	10.6	—	--	2.10	--	
17-14a	Olney Reservoir (New)	Trib. of East Fork	Olney, Ill.	3.36	3.15	Sept. 1954	—	1,555.3	.723	--	—	—	IWS
	do	do	do	—	—	Aug. 1960	6.9	1,517.4	.706	30.3	1.70	1,460	
17-15	Patterson Lake	Trib. of Dismal Creek	Edgewood, Ill.	.959	.912	-- 1926	--	316.75	.516	--	—	—	IWS
	do	do	do	--	—	July 1959	33	282.09	.458	48.54	1.18	1,247.5	
17-16a	Plum Creek No. 15	Little Plum Creek	Taylorsville, Ky.	1.03	1.02	Sept. 1956	—	224.3	.268	—	—	—	SCS
	do	do	do	--	—	Apr. 1959	2.5	219.6	.262	65	1.06	1,803	
	do	do	do	—	--	Oct. 1960	1.5	213.2	.254	53	4.19	4,037	
17-17	Plum Creek No. 17	Trib. of Little Plum Creek	do	.56	.55	Dec. 1956	—	126.3	.263	—	--	—	SCS
	do	do	do	--	--	Apr. 1959	2.33	123.7	.258	56	2.00	2,439	
	do	do	do	--	--	Oct. 1960	1.5	121.2	.252	67	3.11	3,180	
17-18	Steiner Lake	Trib. of Pond Creek	Fairfield, Ill.	.308	.295	-- 1945	—	53.60	.261	—	--	--	IWS
	do	do	do	--	—	June 1960	15	48.62	.237	41.3	1.15	1,024.3	

17-19	Stevenson's Lake	Trib. of Kettering Branch	Martinsville, Ill.	.342	.327	--	1930	—	52.31	.238	--	—	—	SWS
	do	do	do	—	—	June	1959	9	46.5	.212	68.8	1.09	1,975.9	
17-20	Vevay Park Lake	Trib. of Range Creek	Greenup, Ill.	.294	.278	—	1926	—	67.42	.305	—	--	--	SWS
	do	do	do	—	—	June	1959	33	54.90	.316	47.61	.07	988.1	
17-21	Beaver Lake	Beaver Creek	Dubois, Ind.	3.95	3.97	Oct.	1955	—	2,466.0	*.707	—	—	—	SCS
	do	do	do	--	--	Oct.	1964	9	2,409.8	*.783	55	2.38	2,032	
17-22	Scottsburg Lake	Trib. of Muscatatuck	Scottsburg, Ind.	2.90	2.90	Fall	1949	—	760.00	*.396	—	—	--	SCS
	do	do	do	--	--	Oct.	1961	12	713.26	*.380	60.8	1.09	1,326.2	
17-23	Cagles Mill (Cataract Lake)	Mill Creek	Cloverdale, Ind.	295	287	Dec.	1952	—	5/232,370	1.123	—	—	--	CE
	do	do	do	--	--	Feb.	1962	9.17	230,906	1.116	62.8	.16	739	
			TENNESSEE RIVER BASIN (BELOW HALES BAR DAM) **Cumberland and Green River Basins**											
18-1	Radnor Lake	Otter Creek	Nashville, Tenn.	2.1	2.0	Mar.	1915	—	1,313	--	--	--	—	SCS
	do	do	do	—	--	Nov.	1960	25.7	1,279	--	—	.660	—	
18-2a	Lake Tandy	Little River	Hopkinsville, Ky.	6.10	6.00	—	1907	—	749	.135	--	--	--	SCS
	do	do	do	—	—	Jan.	1961	34	566	.099	63	1.00	936	
	do	do	do	--	—	June	1959	18.5	509	.089	63	.495	463	
18-3a	Great Falls	Caney Fork River	Rock Island, Tenn.	1,675	1,671	Sept.	1935	—	56,985	.024	--	—	--	TVA
	do	do	do	—	—	Aug.	1947	12.0	52,370	.023	*60	.127	166	
	do	do	do	--	--	Jan.	1954	6.4	51,836	.023	*60	.050	65	
	do	do	do	--	--	Sept.	1960	6.6	51,591	.022	*60	.022	29	
	do	do	do	--	—	Nov.	1969	9.2	51,381	.023	*60	.02	26	
18-4a	Guntersville	Tennessee River	Guntersville, Ala.	24,450	2,990	Nov.	1940	—	1,097,380	—	—	—	—	TVA
	do	do	do	--	—	June	1947	6.6	1,080,097	—	*55	.979	1,173	
	do	do	do	--	—	May	1956	8.9	1,073,164	—	*55	.161	408	
	do	do	do	--	--	July	1961	5.1	1,064,228	—	*55	.487	823	
18-5a	Wheeler	do	Town Creek, Ala.	29,590	6/5,033	Oct.	1936	--	7/1,122,000	—	—	—	--	TVA
	do	do	do	—	—	June	1947	10.7	7/1,071,717	—	*55	8/—	8/—	
	do	do	do	—	—	May	1953	6.0	7/1,061,411	—	*55	.142	408	
	do	do	do	—	—	June	1956	3.0	1,061,005	—	*55	.077	32	
	do	do	do	--	--	Aug.	1961	5.1	1,050,303	—	*55	.437	500	
18-6a	Wilson	do	Florence, Ala.	30,750	1,135	Dec.	1928	—	687,000	—	--	—	--	TVA
	do	do	do	--	--	Dec.	1931	3.0	676,000	—	*53	9/.479	552.9	
	do	do	do	—	—	Dec.	1936	5.0	652,000	—	*53	9/.490	565.6	
	do	do	do	—	—	Sept.	1946	9.8	651,000	—	*53	10/.120	138.5	
	do	do	do	—	—	June	1951	4.7	650,000	—	*53	10/.120	138.5	
	do	do	do	—	—	June	1956	5.0	648,000	—	*53	10/.401	462.0	
	do	do	do	--	—	Aug.	1961	5.1	641,000	—	*53	10/1.274	1,471.0	
18-7a	Pickwick Landing	do	Pickwick, Tenn.	32,820	1,997	Feb.	1938	—	1,130,313	—	--	—	--	TVA
	do	do	do	--	—	Sept.	1946	8.6	1,116,389	—	*53	.811	936	
	do	do	do	--	--	June	1951	4.7	1,118,082	—	*53	11/-.180	—	
	do	do	do	--	—	June	1956	5.1	1,115,811	--	*53	.125	144	
	do	do	do	--	--	Aug.	1961	5.2	1,105,256	—	*53	1.113	1,285	
18-8a	Kentucky	do	Gilbertsville, Ky.	40,200	7,131	Aug.	1944	—	2/2,879,549	—	—	--	--	TVA
	do	do	do	--	--	May	1951	6.7	2/2,855,440	—	*53	.719	830	
	do	do	do	—	--	July	1956	5.2	2/2,824,388	—	*53	1.107	1,278	
	do	do	do	—	—	Oct.	1961	5.2	2/2,790,855	--	*53	.635	733	
18-9	Dale Hollow	Obey River	Celina, Tenn.	935	887	Apr.	1943	—	1,706,000	1.533	—	—	--	CE
	do	do	do	—	—	June	1960	17.2	—	--	—	—	—	
18-10	Old Hickory	Cumberland River	Old Hickory, Tenn.	12/11,674	2,761	June	1954	—	667,000	--	--	—	—	CE
	do	do	do	—	—	June	1965	11	653,705	--	—	.443	—	
18-11	Wolf Creek (Lake Cumberland)	do	Jamestown, Ky.	5,789	5,690	Aug.	1950	—	6,089,000	.912	—	—	—	CE
	do	do	do	—	--	June	1963	12.87	—	—	—	—	--	
18-12	Rough River Reservoir	Rough River	Falls of Rough, Ky.	454	437.96	Dec.	1959	—	332,940	.066	—	—	--	CE
	do	do	do	--	—	July	1969	9.75	329,470	.057	70.27	.765	1,170	
18-13	Upper Green River #5 (Pilot)	South Fork	Stanford, Ky.	1.44	1.41	Sept.	1955	—	320.71	.23	—	--	--	SCS
	do	do	do	—	—	Apr.	1966	10.5	316.99	.18	59.9	1/.26	1/339	
			OHIO RIVER BASIN (POINT PLEASANT TO MADISON) **Kanawha, Big Sandy, Licking, Kentucky, Scioto, and Miami River Basins**											
19-1	Lake Placid	Unnamed	Lancaster, Ky.	.20	.20	Oct.	1902	—	116	—	—	--	--	SCS
	do	do	do	--	—	Sept.	1961	58.9	95	—	—	13/2.50	--	
19-2	Radford	Little River	Radford, Va.	329	329	Aug.	1936	--	1,646	—	--	--	—	SCS
	do	do	do	--	--	July	1946	10	1,018	—	*70	.191	291	
19-3	Englewood	Stillwater	Dayton, Ohio	652	639	--	1927 14/	—	312,000	*.810	—	--	—	SCS
	do	do	do	--	—	—	1942	15	311,646	*.809	77.5	.037	63	
19-4	Germantown	Twin Creek	Germantown, Ohio	270	264	--	1927 14/	—	106,000	*.554	—	--	--	SCS
	do	do	do	—	—	--	1942	15	105,618	*.552	79.5	.097	148	
19-5b	Griggs	Scioto River	Columbus, Ohio	1,053	1,052	—	1905	—	4,563	.008	—	—	—	[illegible]
	do	do	do	—	--	—	1935	30	3,920	.007	*65	.020	28.3	
	do	do	do	—	--	—	1951	16	3,928	.007	59.4	—	--	
	do	do	do	--	--	—	1966	13	3,737	.007	--	.014	--	

1/ Sediment pool only.
2/ Items are based on corrected instrument surveys of shore line and range locations as used in the 1965 survey.
3/ The noncontributing drainage area is chiefly closed or plugged limestone sinkholes.
4/ In July 1925. In June 1915, spillway elevation was 5 feet lower and capacity was 1,226 ac.-ft.
5/ Revised from 228,120 to 232,370 ac.-ft.
6/ Guntersville Dam closed Jan. 19, 1939, reducing sediment contributing area to 5,033 sq. mi.
7/ Multiple-use capacity excluding diked areas.
8/ 1953 survey revised.
9/ Used drainage area below Hales Bar Dam (8,935 sq. mi.).
10/ Sediment contributing area reduced by closing Wheeler Dam, Oct. 3, 1936, to 1,135 sq. mi.
11/ Minus (-) indicates scour (treated as negative sediment).
12/ Uncontrolled drainage area 2,776 sq. mi.
13/ Including 19,000 cu. yd. dredged in 1950.
14/ Year survey ranges were established.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	OHIO RIVER BASIN (POINT PLEASANT TO MADISON) Kanawha, Big Sandy, Licking, Kentucky, Scioto, and Miami River Basins (Continued)												
19-6	Ohio Cons. Pond No. 73	Blacklick Creek	Columbus, Ohio	26	26	Nov. 1936	—	4.68	—	—	—	—	SCS
	do	do	do	—	—	June 1939	2.6	2.53	—	—	0.035	—	
19-7	Ohio Cons. Pond No. 74	do	do	23	23	Jan. 1937	—	1.06	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1939	2.8	.52	—	—	.008	—	
19-8a	Lake White	Pee Dee Creek	Waverly, Ohio	37.4	36.9	Oct. 1935	—	3,734	—	—	—	—	[illegible]
	do	do	do	—	—	Dec. 1947	12.0	3,330	—	—	0.096	—	
	do	do	do	—	—	Aug. 1951	4.0	1/3,706	—	68.0	1.73	—	
19-9	Herrington Lake	Dix River	Harrodsburg, Ky.	437	431	Oct. 1925	—	258,969	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1941	16	255,706	—	—	.471	—	
19-10	Walton	Bank Lick Creek	Walton, Ky.	.25	.24	— 1931	—	128	—	—	—	—	SCS
	do	do	do	—	—	— 1937	6	122	—	*90	4.46	4,860	
19-11	Williamstown	Grassy Creek	Williamstown, Ky.	.47	.47	— 1930	—	113	—	—	—	—	SCS
	do	do	do	—	—	— 1937	7	106	—	—	2.13	—	
19-12	Byllesby	New River	Byllesby, Va.	1,310	1,310	Aug. 1912	—	8,092	—	—	—	—	SCS
	do	do	do	—	—	May 1936	23.66	3,538	—	—	2/.104	—	
19-13a	O'Shaughnessy	Scioto River	Dublin, Ohio	980	987	Fall 1925	—	3/16,673	*.026	—	—	—	ODW
	do	do	do	—	—	— 1934 4/	9	15,606	*.026	*65	.121	171	
	do	do	do	—	—	— 1942 4/	8	14,538	*.023	*65	.135	191	
	do	do	do	—	—	July 1951	9	14,162	*.022	64.2	.063	60.5	
19-14a	Decker Lake	Patterson Run	Piqua, Ohio	2.33	2.30	— 1940	—	115	*.084	—	—	—	ODW
	do	do	do	—	—	June 1950	10	94	*.069	51.91	.913	1,032	
19-15b	Madison Lake	Deer Creek	London, Ohio	97.2	97.0	— 1946	—	556.0	—	—	—	—	ODW
	do	do	do	—	—	June 1949	2.6	530.2	—	49.0	.43	459	
	do	do	do	—	—	June 1951	2.0	511.0	—	45.9	.17	170	
	do	do	do	—	—	June 1954	3.0	488.7	—	49.9	.14	152	
19-16b	Grant Lake	Sterling Run	Mt. Orab, Ohio	25.25	24.77	Dec. 1948	—	1,142	.0564	—	—	—	ODW
	do	do	do	—	—	July 1950	1.6	1,111	.0550	86.6	.721	1,360	
	do	do	do	—	—	Sept. 1957	7.0	1,088	.0529	—	.267	—	
	do	do	do	—	—	Aug. 1962	5.0	1,027	.0508	—	.324	—	
	do	do	do	—	—	July 1971	9.0	965	.0470	—	.274	—	
19-17	Caldwell Lake	Trib. of Stoney Creek	Waverly, Ohio	1.02	1.00	— 1937	—	88	*.124	—	—	—	ODW
	do	do	do	—	—	Sept. 1949	12	85	*.120	*60	.253	331	
19-18	Stewart Lake	do	Chillicothe, Ohio	.31	.30	— 1939	—	76	—	—	—	—	ODW
	do	do	do	—	—	Sept. 1951	12.3	71	—	*60	.87	1,137	
19-19	Pine Lake	Tar Hollow Creek	Gillespieville, Ohio	2.62	2.60	Fall 1938	—	134	.073	—	—	—	ODW
	do	do	do	—	—	Aug. 1950	11.7	123	.067	68.95	.396	995	
19-20a	Kiser Lake	Mosquito Creek	St. Paris, Ohio	8.73	8.15	Jan. 1940	—	3,215	.575	—	—	—	ODW
	do	do	do	—	—	Jan. 1950	10.5	3,010	.539	*90	2.40	2,610	
	do	do	do	—	—	July 1956	6.0	2,989	.524	39.7	2.48	2,144	
	do	do	do	—	—	June 1962	6.0	2,867	.513	—	.95	—	
19-21	Eversole Run (Trib. area of O'Shaughnessy Res.)	Eversole Run	Dublin, Ohio	13.8	13.7	— 1925	—	304	—	—	—	—	ODW
	do	do	do	—	—	— 1951	26	295	—	55.5	.25	302	
19-22	Allen Lake	Trib. of Silver Creek	Kenton, Ohio	.50	.50	— 1938	—	12	*.043	—	—	—	ODW
	do	do	do	—	—	Aug. 1951	13	10	*.036	52.6	.26	298	
19-23	Sylvan Lake (Lower)	Trib. of Beaver Creek	Vienna, Ohio	1.85	1.39	— 1947	—	275	—	—	—	—	ODW
	do	do	do	—	—	Aug. 1951	3.8	261	—	44.8	2.73	2,444	
19-24	Sylvan Lake (Upper)	do	do	.40	.38	— 1948	—	63	—	—	—	—	ODW
	do	do	do	—	—	Aug. 1951	2.8	59	—	*45	3.53	3,460	
19-25	Mosterman Lake	Trib. of Mad River	Springfield, Ohio	1.57	1.58	Nov. 1938	—	83	—	—	—	—	ODW
	do	do	do	—	—	Aug. 1951	12.7	75	—	66.2	.38	548	
19-26	Reynolds Pond	Trib. of Barren Creek	Bidwell, Ohio	.70	.70	— 1940	—	18	*.034	—	—	—	ODW
	do	do	do	—	—	Aug. 1950	10	15	*.029	57.4	.441	551	
19-27	Mt. Gilead Lake (Upper)	Sams Creek	Mt. Gilead, Ohio	8.55	5/5.90	— 1950	—	28	*.006	—	—	—	ODW
	do	do	do	—	—	Oct. 1968	18	24	*.005	*60	.039	51	
19-28	Schott Pond	Trib. of Big Walnut Creek	Westerville, Ohio	.82	.82	— 1921	—	7.3	—	—	—	—	ODW
	do	do	do	—	—	Aug. 1951	30	6.8	—	57.1	.10	126	
19-29a	Lake Alma	Unnamed	Wellston, Ohio	.81	.70	— 1921	—	774	—	—	—	—	ODW
	do	do	do	—	—	Sept. 1951	30	764	—	55.5	.06	1,045	
19-30	Maple Grove Lake	Sams Creek	Mt. Gilead, Ohio	3.05	3.04	— 1932	—	28.1	*.014	—	—	—	ODW
	do	do	do	—	—	Sept. 1949	17	23.9	*.012	83.2	.079	143	
19-31	Pond Lick Lake	Pond Lick Run	Friendship, Ohio	2.56	2.55	— 1938	—	48	*.024	—	—	—	ODW
	do	do	do	—	—	July 1950	12.3	39	*.019	58.8	.277	355	
19-32	Wolfden Lake	Wolfden Run	do	.60	.60	— 1936	—	25.4	*.053	—	—	—	ODW
	do	do	do	—	—	July 1950	14.3	23.1	*.048	59.92	.272	355	
19-33	Bear Lake	Left Fork Bear Creek	do	.48	.47	— 1935	—	33	*.086	—	—	—	ODW
	do	do	do	—	—	July 1950	15.3	32	*.083	67.02	.196	283	
19-34	McBride Lake	Trib. of Pond Run	do	.61	.61	— 1937	—	13	*.027	—	—	—	ODW
	do	do	do	—	—	July 1950	13.3	11	*.023	34.08	.225	167	

19-35	Roosevelt Lake	Turkey Creek	Friendship, Ohio	16.38	15.76	—	1935	—	101	*.088	—	—	—	ODW
	do	do	do	—	—	July	1950	15.3	67	*.005	61.3	.140	186	
19-36a	Adams Lake	Lick Creek	West Union, Ohio	4.45	4.39	Spring	1947	—	318	.087	—	—	—	ODW
	do	do	do	—	—	July	1950	3.5	306	.083	55.24	.095	1,038	
	do	do	do	—	—	Aug.	1960	10.0	277	.076	—	.626	—	
19-37	Vesuvius Lake	Storms Creek	Ironton, Ohio	10.9	10.7	—	1937	—	1,553	—	—	—	—	ODW
	do	do	do	—	—	June	1949	12	1,463	.183	*56.0	.697	820	
	do	do	do	—	—	July	1952	3	1,[illegible]63	.183	56.0	.019	22	
19-38	Pike Lake	Richardson Hollow of Morgan Fork	Bainbridge, Ohio	3.46	3.42	—	1937	—	3/91.4	—	—	—	—	[illegible]
	do	do	do	—	—	Aug.	1950	13	3/86.5	—	60.2	.11	983	
19-39	Upper Hocking No. 2	Hunters Run	Lancaster, Ohio	1.87	1.77	Apr.	1956	—	3/56.98	—	—	—	—	SCS
	do	do	do	—	—	June	1961	5.0	3/51.02	—	69.237	.437	944.711	
19-40	Jackson Lake	Black Fork River	Oak Hill, Ohio	18.8	18.4	—	1940	—	*1,700	—	—	—	—	ODW
	do	do	do	—	—	—	1951	11	*1,990	—	*60.0	.56	775	
19-41	Loramie Lake	Loramie Creek	Ft. Loramie, Ohio	78.7	77.4	—	1840	—	4,115	.079	—	—	—	[illegible]
	do	do	do	—	—	—	1960	120	3,115	.075	*65	.11	156	
19-42a	Sharon Woods Reservoir	Sharon Creek	Sharonville, Ohio	4.88	4.82	—	1939	—	289	—	—	—	—	ODW
	do	do	do	—	—	—	1962	2.3	274	—	*70	1.27	1,936	
	do	do	do	—	—	—	1965	3.6	232	—	*70	2.44	3,720	
	do	do	do	—	—	—	1969	4.0	206	—	*70	1.38	2,104	
19-43	Cowan Lake	Cowan Creek	Wilmington, Ohio	49.6	48.5	—	1947	—	13,305	.367	—	—	—	ODW
	do	do	do	—	—	—	1960	13	12,770	.352	*90	.047	923	
19-44	Margue Lake	Margue Creek	Circleville, Ohio	6.60	6.40	—	1956	—	2,926	.671	—	—	—	ODW
	do	do	do	—	—	—	1960	4	2,892	.663	*90	1.33	1,450	
19-45	Hillsboro	Trib. of Clear Creek	Hillsboro, Ohio	.73	.69	—	1946	—	279.9	.503	—	—	—	ODW
	do	do	do	—	—	—	1955	9	271.4	.487	*40	1.36	1,190	
19-46	Delaware	Olentangy River	Delaware, Ohio	381	379	Mar.	1951	—	132,000	.536	—	—	—	CE
	do	do	do	—	—	May	1960	9.25	8/131,483	.532	*65	8/.1475	8/208	
19-47	W. Fk. Mill Creek Reservoir (Winton Lake)	W. Fork Mill Creek	Cincinnati, Ohio	29.5	28.6	Dec.	1952	—	9/11,466	.609	—	—	—	CE
	do	do	do	—	—	May	1961	8.42	11,207	.595	71.8	1.08	1,689	
19-48	Brush Creek Reservoir	Brush Creek	Butlerville, Ind.	13.4	13.11	Dec.	1957	—	2,067.4	.183	—	—	—	SCS
	do	do	do	—	—	July	1961	9.6	1,883.0	.167	68.0	1.67	1,536.8	
19-49	Whitewater Lake	Silver Creek	Liberty, Ind.	19.29	19.0	Sept.	1954	—	3,990.0	*.249	—	—	—	SCS
	do	do	do	—	—	July	1963	8.8	3,615.6	*.237	69.5	1.06	1,539	
19-50	Jisco Lake	Trib. of Little Salt Creek	Jackson, Ohio	1.67	1.58	—	1952	—	1,109	.860	—	—	—	ODW
	do	do	do	—	—	Sept.	1968	16	1,092	.846	43.7	.67	638	
	do	do	do	—	—	Aug.	1970	2	1,088	.843	50.7	1.16	2,108	
19-51	Clark Lake	Sinking Creek	Vienna, Ohio	6.88	6.72	Late	1957	—	507.3	.106	—	—	—	ODW
	do	do	do	—	—	Sept.	1961	3.8	485.2	.102	—	.865	—	
	do	do	do	—	—	July	1968	7	456.4	.096	—	.612	—	
19-52	Acton Lake	Four Mile Creek	Oxford, Ohio	107.4	106.5	Feb.	1957	—	9,607	.134	—	—	—	ODW
	do	do	do	—	—	Aug.	1961	10/5	9,393	.131	—	.402	—	
19-53	Middle Fork Reservoir	M. Fork of E. Fork White Water Reservoir	Richmond, Ind.	48.14	47.87	Jan.	1962	—	3,250	.108	—	—	—	SCS
	do	do	do	—	—	Oct.	1967	5.5	3,060.71	.095	49.6	.79	850	
19-54	Colonial Mine Lake	Lambs Creek	Beulah, Ky.	1.05	1.00	Fall	1947	—	206.77	.227	—	—	—	SCS
	do	do	do	—	—	May	1967	20	193.93	.214	*70	.662	978.79	
19-55	"A" Strip Mine Lake	Clear Creek D.A.	Richland, Ky.	.009	.009	—	1947	—	53	3.68	—	—	—	SCS
	do	do	do	—	—	Nov.	1967	20	49.3	3.42	*80	20.56	35,826	
			TENNESSEE RIVER BASIN (ABOVE HALES BAR DAM)											
20-1b	South Holston	South Fork Holston River	Bristol, Tenn.	703	691	Nov.	1950	—	11/661,888	.905	—	—	—	TVA
	do	do	do	—	—	June	1958	7.6	660,581	.903	*55	.249	298	
	do	do	do	—	—	Aug.	1964	6.2	657,963	.900	*55	.611	732	
20-2b	Watauga	Watauga River	Hampton, Tenn.	468	458	Dec.	1948	—	11/572,600	1.199	—	—	—	TVA
	do	do	do	—	—	Mar.	1953	4.3	571,402	1.196	*55	.609	730	
	do	do	do	—	—	Apr.	1958	5.0	570,100	1.194	*55	.568	680	
	do	do	do	—	—	Aug.	1964	6.4	568,839	1.151	*55	.430	515	
20-3b	Boone	South Fork Holston River	Kingsport, Tenn.	1,840	662	Dec.	1952	—	196,648	—	—	—	—	TVA
	do	do	do	—	—	June	1958	5.5	195,633	—	*55	.284	340	
	do	do	do	—	—	Sept.	1964	6.3	193,446	—	*55	.520	623	
20-4b	Fort Patrick Henry	do	do	1,903	62	Oct.	1953	—	27,120	—	—	—	—	TVA
	do	do	do	—	—	June	1959	5.6	26,965	—	*55	.468	561	
	do	do	do	—	—	Nov.	1964	5.5	26,961	—	*55	.012	14.4	
20-5a	Cherokee	Holston River	Jefferson City, Tenn.	3,428	12/1,477	Dec.	1941	—	1,559,570	—	—	—	—	TVA
	do	do	do	—	—	Apr.	1949	7.4	1,550,932	—	*55	.340	407	
	do	do	do	—	—	Apr.	1954	5.0	1,547,776	—	*55	—	12/—	
	do	do	do	—	—	June	1959	5.1	1,545,960	—	*55	.241	299	
	do	do	do	—	—	June	1964	5.0	1,543,987	—	*55	.276	331	

1/ 1951 survey includes several additional ranges. Results of 1947 and 1951 surveys are not directly comparable.

2/ Based on total sediment in Washington Mill, Buck, Byllesby, and Fields Reservoirs; total drainage area 1,320 sq. mi.

3/ Without 3 ft. flashboards added in 1965.

4/ Survey dates: Sept.-Nov. 1934; Sept.-Dec. 1942.

5/ 1952 correction for Maple Grove.

6/ Reservoir partially dredged in March-April 1949. Data on amount of material are unreliable. Actual amounts of sediment probably 10 to 25 percent greater than indicated.

7/ Sediment pool only.

8/ Flood pool elevation 947. Ranges resurveyed to elevation 915. No appreciable sediment above elevation 915.

9/ Revised on basis of topographic maps developed for definite project report and sedimentation range data.

10/ 1957 water year included.

11/ Multiple-use storage capacity. Reservoir has greater capacity at spillway crest elevation.

12/ Sediment contributing area reduced from 3,381 sq.mi. to 1,477 sq. mi. by closing of Watauga Dam Dec. 1, 1948; South Holston on Nov. 20, 1950; Boone on Dec. 16, 1952; and Fort Patrick Henry on Oct. 27, 1953. Area above Watauga included in 1949 survey as sediment contributing area.

* Estimated or assumed.

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SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE -FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
				TENNESSEE RIVER BASIN (ABOVE HALES BAR DAM) (Continued)									
20-6d	Nolichucky	Nolichucky River	Greenville, Tenn.	1,183	1,182	Fall 1913	—	1/3,100	—	—	—	—	TVA
	do	do	do	—	—	Fall 1925	12	2/21,750	.017	—	—	—	
	do	do	do	—	—	Feb. 1938	12.5	14,450	.011	90	0.252	274	
	do	do	do	—	—	Apr. 1947	9.2	12,010	.009	*90	.224	245	
	do	do	do	—	—	May 1953	6.1	9,890	.008	*90	.299	326	
	do	do	do	—	—	Oct. 1958	5.4	7,760	.006	*90	.327	357	
	do	do	do	—	—	Feb. 1961	2.3	7,470	.006	*90	.107	117	
	do	do	do	—	—	Mar. 1967	6.1	3/3,325	.003	*90	.075	82	
	do	do	do	—	—	Sept. 1970	3.5	2,630	.002	*90	.168	183	
20-7c	Douglas	French Broad River	Sevierville, Tenn.	4,541	2,854	Feb. 1943	—	3/1,511,885	.312	—	—	—	TVA
	do	do	do	—	—	July 1949	6.4	1,496,712	.308	*55	.830	994	
	do	do	do	—	—	May 1955	5.8	1,500,870	.309	*55	4/-.251	—	
	do	do	do	—	—	June 1960	5.1	1,489,978	.307	*55	.748	895	
	do	do	do	—	—	Aug. 1967	7.2	1,475,450	.304	*55	.707	847	
20-8c	Fort Loudoun	Tennessee River	Lenoir City, Tenn.	9,550	1,556	Nov. 1946	—	400,965	—	—	—	—	TVA
	do	do	do	—	—	June 1951	4.6	399,414	—	*55	.214	256	
	do	do	do	—	—	Apr. 1956	4.9	398,060	—	*55	.182	217	
	do	do	do	—	—	May 1961	5.1	392,711	—	*55	.674	807	
20-9b	Thorpe	W. Fk. Tuckasegee River	Glenville, N. C.	36.7	34.4	Feb. 1941	—	—	—	—	—	—	TVA
	do	do	do	—	—	Sept. 1950	9.6	3/70,700	.888	—	—	—	
	do	do	do	—	—	July 1958	7.8	70,537	.886	*55	.61	731	
	do	do	do	—	—	May 1969	10.9	70,487	.882	*55	.13	160	
20-10b	Nantahala	Nantahala River	Aquone, N. C.	91	88	Sept. 1950	—	138,083	.561	—	—	—	TVA
	do	do	do	—	—	July 1958	7.9	137,882	.560	*55	.284	340	
	do	do	do	—	—	May 1969	10.8	137,159	.570	*55	.761	911	
20-11c	Fontana	Little Tennessee River	Fontana, N. C.	1,571	1,426	Nov. 1944	—	3/1,455,062	.543	—	—	—	TVA
	do	do	do	—	—	Mar. 1950	5.4	1,452,385	.534	*55	.348	416.9	
	do	do	do	—	—	Sept. 1954	4.5	1,450,646	.534	*55	.271	324.6	
	do	do	do	—	—	June 1959	4.7	1,448,311	.533	*55	.349	418.1	
	do	do	do	—	—	Oct. 1967	8.3	1,443,262	.531	*55	.426	511	
20-12	Cheoah	do	Tapoco, N. C.	1,608	1,607	Dec. 1918	—	5/44,030	.016	—	—	—	TVA
	do	do	do	—	—	Sept. 1930	11.8	39,030	.014	*55	.264	316	
	do	do	do	—	—	Aug. 1941	10.9	6/35,030	.013	—	.228	273	
20-13b	Caryville	Cove Creek	Caryville, Tenn.	35.98	35.65	Nov. 1936	—	4/1,726	—	—	—	—	TVA
	do	do	do	—	—	Nov. 1938	2.0	1,652	—	62	1.038	1,401.7	
	do	do	do	—	—	Jan. 1947	8.2	1,580	—	*62	.250	337.6	
	do	do	do	—	—	Mar. 1954	7.1	1,347	—	*62	.917	1,238.3	
	do	do	do	—	—	Aug. 1960	6.4	1,290	—	*62	.250	337.6	
	do	do	do	—	—	July 1970	9.9	1,118	—	*62	.488	658	
20-14c	Norris	Clinch River	Norris, Tenn.	2,912	2,823	Mar. 1936	—	3/7/2,061,569	.692	—	—	—	TVA
	do	do	do	—	—	June 1946	10.3	2,052,357	.691	*55	.317	379.7	
	do	do	do	—	—	June 1954	8.0	2,047,527	.690	*55	.214	256.2	
	do	do	do	—	—	Aug. 1960	6.1	2,044,768	.689	*55	.160	191.7	
	do	do	do	—	—	June 1970	9.8	2,036,324	.686	*55	.305	366	
20-15c	Watts Bar	Tennessee River	Spring City, Tenn.	17,310	2,925	Oct. 1946	—	1,195,229	—	—	—	—	TVA
	do	do	do	—	—	June 1951	4.7	1,193,106	—	*55	.155	186	
	do	do	do	—	—	Apr. 1956	4.8	1,183,735	—	*55	.667	799	
	do	do	do	—	—	June 1961	5.1	1,174,954	—	*55	.589	706	
20-16b	Chatuge	Hiwassee River	Hayesville, N. C.	189	178	Feb. 1942	—	242,325	.705	—	—	—	TVA
	do	do	do	—	—	Aug. 1949	7.5	242,032	.704	*55	.219	262.3	
	do	do	do	—	—	Aug. 1954	5.0	241,502	.702	*55	.595	712.8	
	do	do	do	—	—	Sept. 1960	6.0	240,999	.701	*55	.472	565.4	
	do	do	do	—	—	Apr. 1965	4.6	240,516	.699	*55	.590	707.0	
20-17b	Nottely	Nottely River	Blairsville, Ga.	214	207	Jan. 1942	—	3/176,521	.586	—	—	—	TVA
	do	do	do	—	—	Aug. 1949	7.6	175,865	.584	*55	.415	497.1	
	do	do	do	—	—	Apr. 1955	5.7	174,969	.581	*55	.758	908.0	
	do	do	do	—	—	May 1961	6.0	174,429	.579	*55	.435	521.0	
	do	do	do	—	—	Apr. 1965	4.0	174,357	.579	*55	.087	104.0	
20-18b	Hiwassee	Hiwassee River	Murphy, N. C.	968	8/539	Feb. 1940	—	3/439,741	—	—	—	—	TVA
	do	do	do	—	—	Aug. 1947	7.5	436,009	—	*55	8/—	8/—	
	do	do	do	—	—	May 1953	5.8	435,686	—	*55	.104	125	
	do	do	do	—	—	June 1958	5.0	434,243	—	*55	.536	642	
	do	do	do	—	—	May 1965	6.9	433,568	—	*55	.182	218	
20-19a	Apalachia	do	Farner, Tenn.	1,018	48	Feb. 1943	—	58,312	—	—	—	—	TVA
	do	do	do	—	—	Aug. 1950	7.5	57,979	—	*55	.938	1,124	
	do	do	do	—	—	Sept. 1960	10.1	57,550	—	*55	.883	1,058	
	do	do	do	—	—	May 1965	4.7	57,752	—	*55	4/—	—	

20-20a	Blue Ridge	Toccoa River	Blue Ridge, Ga.	232	227	Apr. 1944	—	197,427	.462	—	—	—	TVA
	do	do	do	—	—	Aug. 1949	5.3	196,080	.456	*55	1.119	1,340.5	
	do	do	do	—	—	Aug. 1954	5.0	195,981	.454	*55	.881	1,055.35	
	do	do	do	—	—	June 1959	4.8	196,522	.455	*55	4/-.498	—	
	do	do	do	—	—	Apr. 1968	8.8	195,908	.454	*55	.308	368	
20-21d	Ocoee No. 3	Ocoee River	Ducktown, Tenn.	496	483	Aug. 1942	—	14,304	.027	—	—	—	TVA
	do	do	do	—	—	July 1945	2.9	12,140	—	*64	9/2.114	9/2,947	
	do	do	do	—	—	Nov. 1946	1.3	11,369	—	*64	2.312	3,223	
	do	do	do	—	—	Aug. 1948	1.8	10,570	—	64	1.646	2,296	
	do	do	do	—	—	Aug. 1950	2.0	9,849	—	*64	1.372	1,914	
	do	do	do	—	—	July 1953	3.0	8,696	—	*64	1.460	2,035	
	do	do	do	—	—	Oct. 1955	2.1	8,062	—	*64	1.183	1,649	
	do	do	do	—	—	Oct. 1958	3.0	6,766	—	*64	1.616	2,253	
	do	do	do	—	—	Oct. 1960	2.0	5,920	—	*64	1.608	2,242	
	do	do	do	—	—	June 1962	1.8	5,286	—	*64	1.388	1,885	
	do	do	do	—	—	Sept. 1965	3.2	4,653	—	*64	.753	1,050	
	do	do	do	—	—	Mar. 1968	2.6	4,026	.005	*64	.916	1,278	
20-23d	Ocoee No. 1	do	Parksville, Tenn.	595	10/96	Dec. 1911	—	11/109,200	—	—	—	—	TVA
	do	do	do	—	—	Oct. 1940	28.8	12/91,300	—	*64	—	—	
	do	do	do	—	—	Sept. 1949	8.9	13/86,737	—	64	—	—	
	do	do	do	—	—	Aug. 1954	5.0	87,267	—	*64	4/-1.10	—	
	do	do	do	—	—	June 1959	4.9	86,809	—	*64	.974	1,358	
	do	do	do	—	—	Apr. 1968	8.8	86,466	.091	*64	.406	566	
20-23e	Chickamauga	Tennessee River	Chattanooga, Tenn.	20,790	14/1,805	Nov. 1940	—	746,951	—	—	—	—	TVA
	do	do	do	—	—	July 1947	6.7	734,970	—	*60	14/—	14/—	
	do	do	do	—	—	Aug. 1954	7.0	745,179	—	*60	4/-0.808	—	
	do	do	do	—	—	May 1956	1.8	740,267	—	*60	1.481	1,935	
	do	do	do	—	—	June 1961	5.1	738,820	—	*60	.168	220	
20-24d	Hales Bar	do	Jasper, Tenn.	21,790	15/990	Oct. 1935	—	153,483	—	—	—	—	TVA
	do	do	do	—	—	Oct. 1940	5.0	152,928	—	61	15/—	—	
	do	do	do	—	—	July 1947	6.7	152,251	—	*61	.102	139	
	do	do	do	—	—	Aug. 1954	7.1	152,992	—	*61	4/-.105	—	
	do	do	do	—	—	May 1956	1.8	153,032	—	*61	4/-.022	—	
	do	do	do	—	—	June 1961	5.1	154,002	—	*61	4/-.190	—	
	do	do	do	—	—	Dec. 1967	6.5	154,012	.0096	—	4/-	—	
20-25	Kanuga Lake	Little Mud Creek	Hendersonville, N. C.	1.54	1.50	— 1908	—	16/246	.120	—	—	—	SCS
	do	do	do	—	—	Oct. 1956	48	190	.093	43.1	.780	732	
20-26	Osceola Lake	Shepard Creek	do	4.45	4.39	— 1923	—	16/329	.055	—	—	—	SCS
	do	do	do	—	—	Oct. 1956	33	267	.045	45.7	.428	426	
20-27	Melton Hill	Clinch River	Clinton, Tenn.	3,343	422	July 1963	—	125,920	.0629	—	—	—	TVA
	do	do	do	—	—	May 1970	7	125,578	.0628	*55	.109	131	
20-28	Upper Ollis Creek Reservoir	Ollis Creek	La Follette, Tenn.	10.8	10.75	Apr. 1964	—	661	.051	—	—	—	TVA
	do	do	do	—	—	Oct. 1970	6.5	649	.050	*62	.172	232	
			OHIO RIVER BASIN (ABOVE POINT PLEASANT) AND LAKE ERIE DRAINAGE										
21-1	Pleasant Hill	Clear Fork	Perrysville, Ohio	199	195	Oct. 1938	—	87,700	.676	—	—	—	CE
	do	do	do	—	—	Feb. 1965	6.25	87,424	.674	*65	.227	321	
21-2a	Senecaville	Seneca Fork	Senecaville, Ohio	121	113	Oct. 1938 17/	—	88,500	.962	—	—	—	CE
	do	do	do	—	—	Mar. 1965	8.3	87,667	.953	*65	.89	1,260	
21-3a	Charles Mill	Black Fork, Mohican River	Mansfield, Ohio	216	207	June 1938	—	88,000	*.657	—	—	—	CE
	do	do	do	—	—	Sept. 1946	8.25	85,886	*.641	*65	1.24	1,755	
	do	do	do	—	—	July 1954	7.75	85,483	*.638	*65	.253	358	
21-4	Hinckston Run	Hinckston Run	Johnstown, Pa.	10.75	10.57	— 1905	—	3,453	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1937	32	3,315	—	*60	.408	533	
21-5	Quemahoning	Quemahoning Creek	do	93	90.7	Jan. 1912	—	35,295	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1937	25.8	34,413	—	—	.377	—	
21-6	Salt Lick	Salt Lick Run	do	11.86	11.76	— 1914	—	2,492	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1937	23	2,432	—	*60	.22	287	
21-7a	Bridgeport (Upper)	Jacobs Creek	Mt. Pleasant, Pa.	18/31.64	18/31.52	Mar. 1887	—	642.0	.016	—	—	—	SCS
	do	do	do	—	—	Nov. 1937	50.6	453.0	.011	—	18/.118	160	
	do	do	do	—	—	Nov. 1964	27.0	338.5	.008	65.4	.134	191	

1/ Prior to 1925 dam was 35 ft. lower.

2/ Original volume computed from probings obtained Feb. 1938. Sediment deposits and water inflow computed from dam closure in 1913. Five foot flash boards removed Sept. 1964.

3/ Revised.

4/ Minus (-) indicates scour. Treated as negative sediment.

5/ Computed from probings and available maps.

6/ From first accurate area-volume curves, 1941 conditions.

7/ Multiple-use storage capacity. Reservoir has greater capacity at spillway crest elevation.

8/ Nottely Dam closed Jan. 24, 1942. Chatuge Dam closed Feb. 12, 1942.

9/ Does not include 553 ac.-ft. of sediment flushed into reservoir when small upstream dam failed in Mar. 1944.

10/ Blue Ridge Reservoir closed Dec. 6, 1930. Ocoee #3 closed Aug. 15, 1942.

11/ Based on Tenn. Electric Power Co. data adjusted to latest topographic maps.

12/ Volume computed by average end area method from first accurate area-volume curves - 1940 conditions.

13/ Volume computed from contours based on 1949 survey.

14/ Sediment contributing area reduced by closing Watts Bar Dam on Jan. 1, 1942, and Apalachia Dam, Feb. 14, 1943.

15/ Norris Dam closed Mar. 4, 1936, and Chickamauga Dam closed Jan. 15, 1940, reducing sediment contributing area to 990 sq. mi.

16/ Determined during 1956 survey.

17/ Date storage began. Sediment ranges established and surveyed in Dec. 1937 by Soil Conservation Service, USDA.

18/ Original data revised. 1964 survey data based on corrected elevation and topography from transit survey (1963).

* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

OHIO RIVER BASIN (ABOVE POINT PLEASANT) AND LAKE ERIE DRAINAGE (Continued)

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
21-8	Barberton	Wolf Creek	Barberton, Ohio	28.2	28.0	— 1926	—	2,056	*.101	—	—	—	SCS
	do	do	do	—	—	Dec. 1938	12	1,688	*.083	*55	1.10	1,320	
21-9	Buckeye Lake	S. Fork Licking River	Millersport, Ohio	3/49.2	45.1	— 1832	—	2/19,940	—	—	—	—	SCS
	do	do	do	—	—	July 1939	107	15,790	—	*50	.860	937	
21-10	Leesville	McGuire Creek	Leesville, Ohio	48.0	45.7	Aug. 1936	—	37,400	*1.159	—	—	—	SCS
	do	do	do	—	—	Nov. 1939	3.3	37,390	*1.159	*50	.067	73	
21-11	Muskingum College	Trib. of Muskingum River	New Concord, Ohio	.32	.31	— 1915	—	9.41	*.042	—	—	—	SCS
	do	do	do	—	—	Nov. 1935	20	7.05	*.031	*70	.382	582	
21-12	Ohio Cons. Pond No. 22	Trib. of Duck Creek	Marietta, Ohio	.05	.05	Oct. 1938	—	6.43	*.116	—	—	—	SCS
	do	do	do	—	—	Nov. 1939	1.1	6.21	*.110	*60	6.00	3,485	
21-13	Ohio Cons. Pond No. 51	Trib. of Ohio River	do	.13	.13	Oct. 1938	—	15.16	*.152	—	—	—	SCS
	do	do	do	—	—	Nov. 1939	1.1	15.02	*.151	*60	.977	851	
21-14	Ohio Cons. Pond No. 52	do	do	.17	.16	— 1928	—	17.93	*.138	—	—	—	SCS
	do	do	do	—	—	Nov. 1939	11	15.40	*.118	*50	1.45	1,579	
21-15	Robbins Lake	Ford Creek	Hartford, Ohio	4.47	4.45	Summer 1922	—	91.6	*.028	—	—	—	SCS
	do	do	do	—	—	Dec. 1939	17.4	79.9	*.025	*68	.151	224	
21-16	Gorleys Lake	Trib. of Youghiogheny R.	Uniontown, Pa.	3.00	2.97	— 1909	—	150	—	—	—	—	SCS
	do	do	do	—	—	June 1939	30	138	—	*60	.135	176	
21-17	Lake Rockwell	Cuyahoga River	Kent, Ohio	205.5	3/124.1	Aug. 1914	—	7,423	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1950	36	6,887	—	66	.120	120	
21-18a	Stony Lake	McGuire Creek	Perrysville, Ohio	11.75	11.72	— 1927	—	121	—	—	—	—	ODW
	do	do	do	—	—	Dec. 1938	11.0	80	—	*65	.319	452	
	do	do	do	—	—	May 1949	10.4	61	—	*65	.156	221	
21-19	Tabor Club Lake	Small Br. Muskingum River	do	.55	.54	— 1923	—	53.6	*.145	—	—	—	SCS
	do	do	do	—	—	Dec. 1938	15	42.4	*.115	*70	3/1.38	1,900	
21-20	Zanesville Nursery Lake	N. Br. Blount Run	Zanesville, Ohio	2.95	2.93	Dec. 1936	—	76.62	*.034	—	—	—	SCS
	do	do	do	—	—	July 1941	4.6	72.23	*.032	*65	.326	462	
21-21a	Tionesta	Tionesta Creek	Tionesta, Pa.	478	476	Feb. 1941	—	133,400	.210	—	—	—	CE
	do	do	do	—	—	Sept. 1949	8.6	132,571	.209	*65	.203	287	
21-22b	Loyalhanna	Loyalhanna Creek	Saltsburg, Pa.	290	285	June 1942	—	5/95,300	.278	—	—	—	CE
	do	do	do	—	—	Oct. 1948	6.33	94,652	.276	*66	.358	343	
	do	do	do	—	—	Sept. 1953	4.92	94,192	.275	66	.326	312	
	do	do	do	—	—	Apr. 1962	8.58	93,521	.273	*66	.284	272	
21-23b	Mahoning Creek	Mahoning Creek	Dayton, Pa.	340	336	June 1941	—	6/74,200	.180	—	—	—	CE
	do	do	do	—	—	Aug. 1948	7.2	73,807	.172	*65	.162	229	
	do	do	do	—	—	June 1965	16.8	72,800	.177	63	.178	167	
21-24b	Crooked Creek	Crooked Creek	Ford City, Pa.	277	274	Apr. 1940	—	2/93,900	.307	—	—	—	CE
	do	do	do	—	—	Sept. 1945	5.4	93,808	.307	*65	.062	87.8	
	do	do	do	—	—	Aug. 1964	18.9	92,376	.302	52	.277	308	
21-25a	Tygart River	Tygart River	Grafton, W. Va.	1,184	1,179	Oct. 1937	—	289,600	.175	—	—	—	CE
	do	do	do	—	—	Feb. 1945 8/	—	—	—	—	—	—	
	do	do	do	—	—	Mar. 1959	21.5	287,700	.174	*65	.075	106	
21-26a	Youghiogheny River	Youghiogheny River	Confluence, Pa.	434	428	Oct. 1943	—	254,000	.406	—	—	—	CE
	do	do	do	—	—	Oct. 1949	6.0	253,121	.405	*65	.341	483	
21-27a	Atwood Reservoir	Indian Fk., Conotton Creek	Sherrodsville, Ohio	70	66.2	Apr. 1940	—	49,700	.994	—	—	—	CE
	do	do	do	—	—	Dec. 1946	6.7	49,570	.991	*65	.29	410	
21-28	Babb Pond	Unnamed	Richfield, Ohio	.02	.02	— 1932	—	.265	*.019	—	—	—	SCS
	do	do	do	—	—	Apr. 1951	19	.189	*.015	*60	.15	196	
21-29	Bacon Pond	do	Hudson, Ohio	.32	.32	— 1944	—	3.87	*.019	—	—	—	SCS
	do	do	do	—	—	Apr. 1951	7	3.24	*.016	*60	.281	367	
21-30	Christener Pond	do	Parma, Ohio	.09	.09	— 1940	—	3.60	*.058	—	—	—	SCS
	do	do	do	—	—	Apr. 1951	11	2.79	*.048	*60	.411	778	
21-31	Schoenbeck Pond	do	Richfield, Ohio	.03	.03	— 1940	—	1.48	*.076	—	—	—	SCS
	do	do	do	—	—	Apr. 1951	11	1.29	*.066	*60	.597	781	
21-32	Ticky Pond	do	Peninsula, Ohio	.16	.16	— 1949	—	2.84	*.027	—	—	—	SCS
	do	do	do	—	—	Apr. 1951	2	2.82	*.027	*60	.100	131	
21-33b	Lake Hope	Sandy Run	Zaleski, Ohio	9.95	9.75	May 1939	—	1,555	.201	—	—	—	ODW
	do	do	do	—	—	July 1949	10.2	1,511	.195	74.8	.442	720	
	do	do	do	—	—	June 1955	5.9	1,481	.191	—	.525	—	
	do	do	do	—	—	Aug. 1969	14.2	1,451	.187	—	.213	—	
21-34b	Jefferson Lake	Town Fk. Yellow River	Richmond, Ohio	7.52	7.48	Dec. 1935	—	178	.029	—	—	—	ODW
	do	do	do	—	—	Aug. 1950	15	156	.025	77.9	.199	166	
	do	do	do	—	—	June 1956	6	134	.022	—	.666	—	
	do	do	do	—	—	June 1961	5	131	.021	—	.078	—	

21-35a	Clouse Lake	Str. Br. Rush Creek	Somerset, Ohio	6.7	6.66	—	1948	—	234	.027	—	—	—	CEW
	"	"	"	—	—	—	1949	2.0	217	.025	9/31.7	1.00	10/1,213	
	"	"	"	—	—	—	1950	1.0	226	.023	30.6	1.27	1,177	
	"	"	"	—	—	—	1951	1.0	222	.022	33	.45	693	
	"	"	"	—	—	—	1952	1.0	199	.022	33.6	.34	609	
	"	"	"	—	—	—	1953	1.0	197	.021	61.3	.25	1,239	
	"	"	"	—	—	—	1954	1.0	193	.021	68.2	.41	986	
	"	"	"	—	—	—	1955	1.0	192	.021	—	.14	—	
	"	"	"	—	—	—	1956	1.0	187	.020	—	.55	—	
	"	"	"	—	—	—	1957	1.0	183	.019	—	.47	—	
	"	"	"	—	—	—	1958	1.0	177	.018	—	.44	—	
	"	"	"	—	—	—	1959	1.0	176	.018	—	.18	—	
	"	"	"	—	—	—	1961	2.0	170	.017	—	.37	—	
	"	"	"	—	—	—	1962	1.0	166	.016	—	.42	—	
	"	"	"	—	—	—	1963	1.0	163	.016	—	.33	—	
	"	"	"	—	—	—	1964	1.0	159	.015	—	.43	—	
	"	"	"	—	—	—	1966	2.0	150	.014	—	.55	—	
	"	"	"	—	—	—	1967	1.0	148	.014	—	.22	—	
	"	"	"	—	—	—	1968	1.0	146	.013	—	.236	—	
	"	"	"	—	—	—	1969	1.0	145	.013	—	.136	—	
	"	"	"	—	—	—	1970	1.0	142	.013	—	.319	—	
21-36	East Branch	E. Br. Cuyahoga River	Burton, Ohio	17.53	16.88	—	1939	—	4,699	*.340	—	—	—	CEW
	"	"	"	—	—	June	1949	9.7	4,535	*.331	*60	.799	661	
21-37	Westville Lake	Trib. of Mahoning River	Alliance, Ohio	8.36	8.22	—	1913	—	996	—	—	—	—	CEW
	"	"	"	—	—	Aug.	1950	37	933	—	66	.20	287	
21-38	Berlin	Mahoning River	Berlin Center, Ohio	249	246	July	1943	—	—	—	—	—	—	CE
	"	"	"	—	—	Nov.	1951	8.4	91,200	.552	*100	1.30	2,030	
21-39a	Mountain Lake	Broad Ford Run	Mt. Lake Park, Md.	7.4	7.4	—	1880*	—	122.75	—	—	—	—	SCS
	"	"	"	—	—	July	1957	76	77.02	—	—	.083	—	
21-40	Blamer Lake	Trib. of Sandy Creek	Minerva, Ohio	.07	.07	—	1931	—	.15	—	—	—	—	CEW
	"	"	"	—	—	—	1938	7	.0	—	*65	.29	410	
21-41	Braden Lake	"	"	.12	.12	—	1930	—	.11	—	—	—	—	CEW
	"	"	"	—	—	—	1938	8	.00	—	67	.08	113.3	
21-42	Lake Milton	Mahoning River	Milton, Ohio	280	277.4	—	1916	—	28,100	—	—	—	—	CEW
	"	"	"	—	—	—	1941	25	22,250	—	*65	.84	1,109	
21-43	Petero Pond	Trib. of Indian Creek	Lancaster, Ohio	.11	.11	—	1946	—	9.46	—	—	—	—	CEW
	"	"	"	—	—	—	1954	8	9.11	—	48.1	.36	377	
21-44	Wyandot Lake	Trib. of Clear Creek	Logan, Ohio	.58	.58	—	1950	—	11.5	—	—	—	—	CEW
	"	"	"	—	—	—	1968	18	4.65	—	—	.657	—	
21-45	Orchard Park	Pipe Creek	Orchard Park, N. Y.	1.67	—	—	1928	—	169.99	—	—	—	—	SCS
	"	"	"	—	—	Oct.	1951	23	161.26	—	*60	.23	300	
21-46	Terra Alta Lake	Snowy River	Kingwood, W. Va.	4.76	—	—	1902	—	144.8	—	—	—	—	SCS
	"	"	"	—	—	June	1952	50	117.3	—	*50	.177	127	
21-47	Centerville Mills Lake	Aurora Br. Chagrin River	Aurora, Ohio	10.4	10.38	—	1855	—	86.3	.010	—	—	—	CEW
	"	"	"	—	—	—	1949	94	38.3	.004	*65	.0493	69.6	
21-48	Meander Creek	Meander Creek	Youngstown, Ohio	84.9	81.76	—	1929	—	32,400	.997	—	—	—	CEW
	"	"	"	—	—	—	1949	20	31,835	.986	*65	.366	489	
21-49	Seward Shane	Salem Fork	Salem, W. Va.	.29	.29	Oct.	1954	—	69.58	.265	—	—	—	SCS
	"	"	"	—	—	Oct.	1956	2.0	68.95	.262	*60	1.09	1,426.4	
	"	"	"	—	—	Oct.	1958	2.0	68.77	.262	—	.31	405.1	
	"	"	"	—	—	Dec.	1960	2.2	68.60	.261	—	.27	352.8	
21-50	Knox Lake	E. Branch Kokosing	Fredericktown, Ohio	31.4	30.66	11/Fall	1949	—	3,920	.166	—	—	—	CEW
	"	"	"	—	—	Aug.	1960	7	3,399	.142	—	.48	—	
	"	"	"	—	—	July	1970	10	3,253	.137	—	.378	—	
21-51	Veto Lake	Little Hocking River	Belpre, Ohio	20.04	19.79	May	1954	—	1,111	.0642	—	—	—	CEW
	"	"	"	—	—	July	1955	1.2	1,092	.0631	—	.787	—	
	"	"	"	—	—	July	1960	5	1,059	.0612	—	.342	—	
	"	"	"	—	—	Aug.	1966	6	1,009	.0583	—	.419	—	
21-52	Clear Fork Reservoir	Clear Fork	Lexington, Ohio	33.63	32.05	Oct.	1948	—	13,176	.565	—	—	—	CEW
	"	"	"	—	—	Aug.	1956	8	12,886	.553	—	1.13	—	
	"	"	"	—	—	July	1962	6	12,731	.546	—	.806	—	
21-53	Findley Lake	Wellington Creek	Wellington, Ohio	6.25	6.12	Mar.	1956	—	760.4	.190	—	—	—	CEW
	"	"	"	—	—	June	1961	5.6	745.5	.186	—	.435	—	
21-54	Lake Logan	Clear Fork	Logan, Ohio	14.7	14.17	Feb.	1955	—	3,162	.291	—	—	—	CEW
	"	"	"	—	—	Aug.	1966	11.8	3,081	.285	—	.363	—	
21-55	Ischua Creek Site #2	Johnson Creek	Franklinville, N. Y.	2.8	2.75	Aug.	1964	—	465	.156	—	—	—	SCS
	"	"	"	—	—	July	1967	2.91	464.72	.156	*80	.0345	60.5	
	"	"	"	—	—	Sept.	1969	2.16	464.33	.156	80	.0665	116	
21-56	Ischua Creek Site #5	Gates Creek	"	6.4	6.28	Aug.	1964	—	1,085	.159	—	—	—	SCS
	"	"	"	—	—	Aug.	1967	3	1,083.77	.159	*80	.065	113.3	
	"	"	"	—	—	Sept.	1969	2.12	1,082.95	.159	80	.062	108	

1/ Drainage area has been 115 sq. mi. (net) part of the time in the past, when fed partly by feeder from S. Fork Kirkersville River.

2/ At present spillway elevation (lowered in 1928). From 1836 to 1908, spillway elevation was 893.4, surface area 3,636 acres, and capacity 22,090 ac.-ft. From 1832 to 1836, spillway elevation was lower and surface area was 3,136 acres. Natural lake of 650 acres originally.

3/ East Branch Reservoir and many natural lakes act as efficient sediment traps.

4/ Dam failed earlier in 1938 but little sediment lost.

5/ At elevation 975. Elevation top of gates = 976 ft.

6/ At elevation 1,162. Elevation top of gates = 1,164 ft.

7/ At elevation 920. Spillway crest elevation = 918 ft.

8/ In view of the limited amount of sediment computed in the 1945 report (384 ac.-ft.), the values of the 1945 report are not included and were not used in computing survey data for the 1939 report. It is considered that the longer period (21.5 yr.) was necessary to develop a volume capable of being measured with a reasonable degree of accuracy.

9/ Density for entire period of record.

10/ Computed from differences in total sediment accumulation in tons at each survey.

11/ Gate closed Fall 1949. Drained March 1950. Gate closed May 1954.

* Estimated or assumed.

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SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
				OHIO RIVER BASIN (ABOVE POINT PLEASANT) AND LAKE ERIE DRAINAGE (Continued)									
21-57	North Fk. Cowanesque River (PA-406)	White Branch	North Fork, Pa.	3.4	3.3	Aug. 1962	--	654.13	.21	--	--	--	SCS
	do	do	do	--	--	July 1967	4.9	653.09	.21	71	1/0.025	1/23.2	
21-58	Salem Fork No. 11A	Varner Hollow	Salem, W. Va.	.288	.287	Oct. 1954	--	53	.166	--	--	--	SCS
	do	do	do	--	--	Oct. 1956	2	52.25	.166	*60	1.307	1,708	
	do	do	do	--	--	Oct. 1958	2	52.05	.165	--	.348	455	
	do	do	do	--	--	Dec. 1960	2.17	51.95	.165	--	.16	209	
	do	do	do	--	--	June 1962	1.50	51.75	.164	--	.443	579	
21-59	Upper Hocking No. 1	Hunters Run	Lancaster, Ohio	1.04	.96	Apr. 1956	--	450	.082	--	--	--	SCS
	do	do	do	--	--	June 1962	6.08	446.13	.075	71.6	.678	1,057	
				GREAT LAKES DRAINAGE (IN MICHIGAN) AND MAUMEE RIVER BASIN									
22-1	Grand2/	St. Marys and Wabash River	Celina, Ohio	118	93	-- 1844	--	3/130,175	*2.193	--	--	--	SCS
	do	do	do	--	--	Aug. 1940	96	106,605	*1.796	*55	2.64	3,162	
22-2	Stronach	Pine R. of Manistee River	Wellston, Mich.	291	233	-- 1912	--	640	*.003	--	--	--	SCS
	do	do	do	--	--	Jan. 1953	41	27	*.0001	110.4	.064	156	
22-3	Geller Pond	Unnamed	Defiance, Ohio	.026	.024	Mar. 1945	--	9.5	*.761	--	--	--	CON
	do	do	do	--	--	Aug. 1951	6.4	9.4	*.753	*45	.92	902	
22-4a	Auglaize R. Power	Auglaize River	do	2,329	2,326	-- 1912	-	4/14,400	.012	--	--	--	CON
	do	do	do	--	--	-- 1951	39	11,600	.009	--	.031	--	
22-5	Eagle Creek5/	Eagle Creek	do	5.23	5.20	-- 1912	--	129	.050	--	--	--	CON
	do	do	do	--	--	July 1951	39	76	.029	99	.27	347	
22-6	Beetree Creek5/	Beetree Creek	do	1.94	1.91	-- 1912	--	148	*.156	--	--	--	CON
	do	do	do	--	--	Aug. 1951	39	104	*.109	52.5	.59	675	
22-7	Batt Pond	Unnamed	do	.013	.012	Apr. 1945	--	2.6	*.417	--	--	--	CON
	do	do	do	--	--	July 1951	6.3	2.5	*.401	73.4	2.75	4,396	
22-8	Harrison Lake	Mill Creek	Fayette, Ohio	37.2	37.0	-- 1941	--	991	.051	--	--	--	CON
	do	do	do	--	--	June 1949	8.3	929.1	.048	53.2	.20	252	
	do	do	do	--	--	July 1951	2.1	902.4	.046	*53	.34	392	
22-9	Allmandinger Pond	Unnamed	Ohio City, Ohio	.038	.035	Jan. 1945	--	5.08	*.239	--	--	--	CON
	do	do	do	--	--	July 1951	6.7	4.71	*.221	53.7	1.71	2,001	
22-10	Bucyrus No. 2	Trib. of Sandusky River	Bucyrus, Ohio	2.84	2.79	-- 1919	--	262	.120	--	--	--	CON
	do	do	do	--	--	June 1949	30	218	.108	65.4	.28	277	
22-11c	Contris Pond6/	Trib. of Hoo Creek	Lafayette, Ohio	.13	.13	-- 1947	--	9.2	.133	--	--	--	CON
	do	do	do	--	--	-- 1951	4	7.9	.114	57.8	2.60	3,270	
	do	do	do	--	--	-- 1954	3	7.4	.107	*69.3	1.36	1,460	
	do	do	do	--	--	-- 1962	8	6.3	.091	--	.969	--	
22-12	Sixmile Creek5/	Sixmile Creek	Defiance, Ohio	21.6	21.4	-- 1912	--	995	*.094	--	--	--	CON
	do	do	do	--	--	July 1951	39	696	*.066	43.8	.36	343	
22-13a	Burt Lake	Unnamed	Oakwood, Ohio	.76	.74	Sept. 1948	--	59	*.155	--	--	--	CON
	do	do	do	--	--	July 1951	2.8	57	*.150	37.2	1.13	946	
22-14	Kohart Pond	Unnamed	Grover Hill, Ohio	.021	.019	Sept. 1943	--	2.4	*.229	--	--	--	CON
	do	do	do	--	--	July 1951	7.8	2.3	*.219	26.1	.53	301	
22-15	Van Buren Lake	Rocky Ford Creek	Findlay, Ohio	22.80	22.72	Spring 1939	--	248	.022	--	--	--	CON
	do	do	do	--	--	Nov. 1948	9.5	205	.019	53.6	.20	233	
	do	do	do	--	--	Aug. 1951	2.8	186	.017	57.9	.31	391	
22-16	Norvell Lake	River Raisin	Norvell, Mich.	58.5	25.3	-- --	--	717.6	.026	--	--	--	SCS
	do	do	do	--	--	May 1969	100±	502.3	.018	23.3	.085	43	
22-17	Sharon Hollow	do	Manchester, Mich.	34.7	25	-- 1927	--	258.1	.016	--	--	--	SCS
	do	do	do	--	--	May 1969	42	143.9	.009	30.1	.11	72	
22-18	Brooklyn Mill Pond	do	Brooklyn, Mich.	29.6	6.2	-- 1948	--	249.3	.016	--	--	--	SCS
	do	do	do	--	--	May 1969	21	186.3	.012	43.4	.464	457	
22-19	Manchester Power Dam	do	Manchester, Mich.	6.4	6.4	-- 1946	--	288.9	.09	--	--	--	SCS
	do	do	do	--	--	May 1969	23	259.5	.08	31.5	.20	137	
22-20	Iron Mill Pond	Iron Creek	do	14.4	5.2	-- --	--	1,551	.224	--	--	--	SCS
	do	do	do	--	--	Aug. 1969	100	1,159	.168	--	.75	--	
22-21	Phoenix Pond	Middle River Rouge	Plymouth, Mich.	56.85	56.85	-- --	--	225	.0076	--	--	--	SCS
	do	do	do	--	--	Sept. 1969	100	170	.0056	41.8	.0097	8.8	
22-22	Saline Mill Pond	Saline River	Saline, Mich.	73.6	63	-- 1938	--	240.1	.0061	--	--	--	SCS
	do	do	do	--	--	Mar. 1969	31	129.6	.0033	44	.057	54	
22-23	Manchester Mill Pond	Raisin River	Manchester, Mich.	17	17	-- 1906	--	21.33	.0026	--	--	--	SCS
	do	do	do	--	--	May 1969	63	10.9	.0013	38	.01	8	
22-24	Bridgeway Lake	Unnamed	Dexter, Mich.	7.5	7.5	-- 1928	--	76.7	.0250	--	--	--	SCS
	do	do	do	--	--	Mar. 1969	41	47.9	.0156	46	.093	93	
22-25	Franklin Mill Pond	Franklin Branch Rouge	Franklin, Mich.	13.8	7.8	-- 1833	--	97.8	.0133	--	--	--	SCS
	do	do	do	--	--	Apr. 1969	136	13.1	.0018	50	.079	86	
22-26	Waterford Pond	Middle River Rouge	Northville, Mich.	54	54	-- --	--	173	.0067	--	--	--	SCS
	do	do	do	--	--	Sept. 1969	100	108	.0039	39	.013	11	

22-27	Tecumseh Mill Pond	Evans Creek	Tecumseh, Mich.	31.6	26.3	—	1827	—	227.8	.01501	—	—	—	SCS
	do	do	do	—	—	Apr.	1969	142	94.7	.0062	59	.0356	45	
22-28	Belleville Lake	Huron River	Belleville, Mich.	810	20.3	—	1929	—	19,945	.0513	—	—	—	SCS
	do	do	do	—	—	July	1969	40	17,980	.0462	69	2.42	3,637	
22-29	Ford Lake	do	Ypsilanti, Mich.	790	11.2	—	1933	—	17,926	.0472	—	—	—	SCS
	do	do	do	—	—	July	1969	36	16,085	.0424	81	4.56	8,045	
22-30	Barton Pond	do	Ann Arbor, Mich.	708	183	—	1915	—	3,190	.0083	—	—	—	SCS
	do	do	do	—	—	July	1969	54	2,461	.0068	33	.055	66	
22-31	Red Mill Pond	Upper Raisin	Tecumseh, Mich.	172.9	25.9	—	—	—	677	.0081	—	—	—	SCS
	do	do	do	—	—	Aug.	1969	100+	336	.0040	41.9	.13	118	
22-32	H. H. Fry Pond	Squaw Creek	Onsted, Mich.	12.45	12.45	Early	1962	—	121.3	.020	—	—	—	SCS
	do	do	do	—	—	Aug.	1969	7	116	.019	—	.06	—	
22-33	Newburgh Lake	Middle Rouge	Plymouth, Mich.	54.3	54.3	—	1933	—	667.8	.026	—	—	—	SCS
	do	do	do	—	—	Sept.	1969	36	562.9	.022	56.08	.054	65.96	
22-34	Lake Adrian	Wolf Creek	Adrian, Mich.	65	59	—	1962	—	1,000	.032	—	—	—	SCS
	do	do	do	—	—	Sept.	1969	28	831	.027	75.1	.09	147	

GREAT LAKES DRAINAGE (IN MICHIGAN AND WISCONSIN)

23-

MISSISSIPPI RIVER BASIN (LOUISIANA TO CHESTER) ILLINOIS, KASKASKIA, AND MERAMEC RIVER BASINS

24-1a	Lake Williamson (Artic Pond)-	Trib. of Honey Creek	Carlinville, Ill.	.53	.51	—	1932	—	175.6	.616	—	—	—	IWS
	do	do	do	—	—	—	1949	27	159.5	.558	46.24	1.18	1,188	
	do	do	do	—	—	—	1954	5	152.2	.532	46.24	2.90	2,921	
	do	do	do	—	—	—	1961	7	147.6	.516	46.24	1.25	1,259	
24-2b	Lake Bloomington	Money Creek	Hudson, Ill.	61	60	Dec.	1929	—	6,654	1.981	—	—	—	IWS
	do	do	do	—	—	Aug.	1948	18.7	6,062	1.805	41.5	.528	477	
	do	do	do	—	—	Aug.	1952	4.0	5,905	1.756	41.5	.655	592	
	do	do	do	—	—	July	1955	2.9	5,863	1.746	46	.262	243	
24-3b	Lake Carlinville	Honey Creek	Carlinville, Ill.	26.06	25.79	June	1939	—	1,725	.118	—	—	—	IWS
	do	do	do	—	—	June	1949	10.4	1,475	.101	59.1	.934	1,200	
	do	do	do	—	—	July	1954	5.1	1,427	.098	65.7	.365	521	
	do	do	do	—	—	Sept.	1959	5.1	1,387	.095	62.4	.302	480	
24-4a	Lake Decatur	Sangamon River	Decatur, Ill.	906	902	Apr.	1922	—	19,738	—	—	—	—	SCS
	do	do	do	—	—	July	1936	14.2	16,930	—	—	.220	248	
	do	do	do	—	—	June	1946	10.0	14,967	—	51.7	.262	295	
24-5	Shaefer Pond	Trib. of Cahokia Creek	Edwardsville, Ill.	.087	.083	Nov.	1937	—	20.2	—	—	—	—	IWS
	do	do	do	—	—	July	1949	11.8	17.6	—	*50	2.65	2,890	
24-6	Lake Springfield	Sugar and Lick Creeks	Springfield, Ill.	265	258	Jan.	1934	—	61,039	—	—	—	—	IWS
	do	do	do	—	—	Aug.	1948	14.6	58,380	—	43	.705	660	
24-7	Spring Lake	Spring Creek	Macomb, Ill.	20.2	20.1	Apr.	1927	—	607	—	—	—	—	IWS
	do	do	do	—	—	Sept.	1947	20.4	320	—	59.7	.702	911	
24-8	Lake Bracken	Brush Creek	Galesburg, Ill.	9.14	8.85	Dec.	1923	—	2,881	—	—	—	—	IWS
	do	do	do	—	—	Aug.	1936	12.7	2,660	—	—	1.97	2,231	
	do	do	do	—	—	June	1949	12.9	2,452	—	52	1.82	2,061	
24-9	Pittsfield	Trib. of Panther Creek	Pittsfield, Ill.	1.84	1.77	June	1925	—	7/367	*.490	—	—	—	SCS
	do	do	do	—	—	Dec.	1946	21.5	232	*.310	*40	3.55	3,090	
24-10a	Lock and Dam 25 (Winfield)	Mississippi River	Winfield, Mo.	142,000	—	July	1939	—	180,000	—	—	—	—	CE
	do	do	do	—	—	May	1945	5.9	194,100	—	—	—	—	
	do	do	do	—	—	May	1946	1.0	181,400	—	—	—	—	
	do	do	do	—	—	Dec.	1947	1.6	184,000	—	—	—	—	
	do	do	do	—	—	May	1959	11.4	155,000	—	—	—	—	
24-11a	Mt. Sterling	Trib. of Shelby Creek	Mt. Sterling, Ill.	1.80	1.75	—	1935	—	306	.393	—	—	—	IWS
	do	do	do	—	—	—	1951	16	268	.319	60	2.05	2,679	
24-12	Lake Jacksonville	Sandy Creek	Jacksonville, Ill.	10.8	10.1	—	1939	—	7,058	1.167	—	—	—	IWS
	do	do	do	—	—	June	1952	12.0	6,874	1.137	32.5	1.51	1,069	
24-13	Mauvaisse Terre Lake	Mauvaisse Terre Creek	do	32.6	32.2	—	1921	—	1,820	.100	—	—	—	IWS
	do	do	do	—	—	June	1952	31	1,215	.067	48.2	.61	640	
24-14a	Morgan Lake	Unnamed	do	2.75	2.72	—	1900	—	126	.082	—	—	—	IWS
	do	do	do	—	—	June	1952	52	73	.047	41.2	.38	341	
24-15a	Langdon Pond	do	Franklin, Ill.	.358	.348	—	1907	—	56.8	.284	—	—	—	IWS
	do	do	do	—	—	July	1952	45	44.8	.224	31.8	.78	540	
24-16	Franklin Outing Club Lake	do	do	.450	.414	—	1905	—	328	1.302	—	—	—	IWS
	do	do	do	—	—	July	1952	47	301	1.194	52.4	1.43	1,632	
24-17	Anderson Lake	do	Concord, Ill.	.631	.600	—	1909	—	267	.756	—	—	—	IWS
	do	do	do	—	—	July	1952	43	234	.663	36.2	1.28	1,009	
24-18	Waverly City	do	Waverly, Ill.	9.26	9.16	Oct.	1938	—	308.3	.060	—	—	—	IWS
	do	do	do	—	—	July	1952	13.8	238.6	.045	42.4	.551	509	
24-19	Whitehall City	do	Whitehall, Ill.	.97	.92	—	1897	—	459	.846	—	—	—	IWS
	do	do	do	—	—	July	1952	55	408	.751	43.1	1.02	957	
24-20	Roodhouse Park District Lake	do	Roodhouse, Ill.	.451	.439	—	1917	—	61.6	.243	—	—	—	IWS
	do	do	do	—	—	July	1952	35	53.9	.213	42.4	.90	462	
24-21	Woodbine Country Club Lake	do	Greenfield, Ill.	.329	.320	—	1926	—	58.5	.318	—	—	—	IWS
	do	do	do	—	—	July	1952	26	43.4	.236	54.4	1.81	2,144	
24-22	Dale Cole Pond	do	do	.231	.221	—	1924	—	67.2	.521	—	—	—	IWS
	do	do	do	—	—	July	1952	28	56.7	.440	53.7	1.72	2,012	
24-23	Seely Pond	do	Hillview, Ill.	.093	.091	—	1902	—	3.7	.071	—	—	—	IWS
	do	do	do	—	—	July	1952	50	2.2	.042	35.6	.30	233	

1/ Sediment pool only.
2/ Also known as Lake St. Marys.
3/ At present spillway elevation (lowered in 1856). In 1844 surface area was 17,603 acres and storage capacity was 220,400 ac.-ft.
4/ Capacity and sediment figures include that of several tributary arms including Beetree, Eagle and Stimmile Creeks.
5/ Tributary arm of Auglaize River Power Reservoir.
6/ All figures subject to readjustment because of minor dredging which occured in 1953.
7/ At present spillway elevation; spillway raised 1.24 ft. in 1944.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	MISSISSIPPI RIVER BASIN (LOUISIANA TO CHESTER) ILLINOIS, KASKASKIA, AND MERAMEC RIVER BASINS (Continued)												
24-24	Vineyard Pond	Unnamed	Whitehall, Ill.	0.054	0.052	Jan. 1937	--	1.58	.053	--	--	--	ISWS
	do	do	do	--	--	July 1952	15.6	1.32	.044	36.2	0.33	260	
24-25	Kampp	do	Springfield, Ill.	3.49	3.43	-- 1907	--	181.8	.093	--	--	--	ISWS
	do	do	do	--	--	Aug. 1952	45	115.3	.059	38.7	.431	363	
24-26	Aschauer Pond	do	Riverton, Ill.	.526	.518	-- 1939	--	18.3	.062	--	--	--	ISWS
	do	do	do	--	--	Aug. 1952	13	9.4	.032	56.2	1.31	1,603	
24-27	Schmidt Pond	do	Chatham, Ill.	1.31	1.30	-- 1943	--	6.0	.008	--	--	--	ISWS
	do	do	do	--	--	Aug. 1952	9	3.4	.005	41.2	.22	197	
24-28	Ayers	Trib. of Shoal Creek	Ayers, Ill.	1.43	1.39	-- 1906	--	200	.262	--	--	--	ISWS
	do	do	do	--	--	Aug. 1958	52	150	.197	51.03	.69	766.87	
24-29a	Dodsman Reservoir	Trib. of West Creek	Brunswick, Ind.	2.73	2.39	Aug. 1947	--	52.1	*.036	--	--	--	SCS
	do	do	do	--	--	Sept. 1960	13	44.8	*.031	56.7	.23	284	
24-30	C B & Q R. R. Lake	Trib. of Sangamon River	Tallula, Ill.	.85	.84	-- 1902	--	31.7	.067	--	--	--	ISWS
	do	do	do	--	--	July 1952	50	15.4	.032	49.3	.39	419	
24-31	Edwards Lake	Trib. of Cahokia Creek	Gillespie, Ill.	.42	.40	-- 1949	--	74.2	.351	--	--	--	ISWS
	do	do	do	--	--	Aug. 1958	9	68.0	.322	46.86	1.72	1,755.47	
24-32	Stehman's Lake	Trib. of Kaskaskia River	Vandalia, Ill.	.27	.26	-- 1943	--	19.7	.137	--	--	--	ISWS
	do	do	do	--	--	Aug. 1958	15	16.0	.111	55.66	.93	1,127.13	
24-33	Glasier No. 1	Lost Creek	Elsberry, Mo.	1.05	1.04	Apr. 1956	--	1/72.5	--	--	--	--	SCS
	do	do	do	--	--	July 1960	4.3	70.3	--	--	.69	--	
24-34	I. C. at Kinmundy	Trib. of East Fork of Kaskaskia River	Kinmundy, Ill.	.618	.581	-- 1902	--	174.14	.459	--	--	--	ISWS
	do	do	do	--	--	July 1959	57	149.10	.323	35.5	.756	584.5	
24-35	King's Lake	Trib. of Cahokia Creek	Eagarville, Ill.	.46	.44	-- 1921	--	158.6	.680	--	--	--	ISWS
	do	do	do	--	--	June 1958	37	139.5	.598	54.42	1.17	1,386.73	
24-36	Lake Coulterville	South Fork Mud Creek	Coulterville, Ill.	1.22	1.18	-- 1940	--	200	.276	--	--	--	ISWS
	do	do	do	--	--	Aug. 1954	14	188	.260	34	.73	541	
24-37	Lake Bunker Hill	Wood River	Bunker Hill, Ill.	7.19	7.15	-- 1937	--	133	.033	--	--	--	ISWS
	do	do	do	--	--	June 1954	17	36	.009	79.2	.80	1,380	
24-38	Lake Gillespie	Dry Fork	Gillespie, Ill.	5.73	5.62	-- 1923	--	799	.272	--	--	--	ISWS
	do	do	do	--	--	July 1954	32	696	.237	37.9	.57	470	
24-39	Lake Nashville	Nashville Creek	Nashville, Ill.	1.39	1.13	-- 1936	--	320	.376	--	--	--	ISWS
	do	do	do	--	--	Aug. 1954	19	289	.339	35.3	1.19	913	
24-40	Lake Staunton	East Creek	Staunton, Ill.	3.68	3.54	-- 1926	--	1,268	.630	--	--	--	ISWS
	do	do	do	--	--	July 1954	28	1,140	.575	28.1	1.09	667	
24-41	Macoupin County Lake Club	Trib. of Hurricane Creek	Carlinville, Ill.	.28	.26	-- 1904	--	160.5	1.131	--	--	--	ISWS
	do	do	do	--	--	June 1958	54	135.8	.976	37.13	1.76	1,423.32	
24-42a	Mine Pond No. 4	Trib. of Cahokia Creek	Wilsonville, Ill.	5.29	5.23	-- 1916	--	296.1	.110	--	--	--	ISWS
	do	do	do	--	--	July 1958	42	161.6	.053	65.34	.70	996	
24-43	New Mt. Olive	do	White City, Ill.	5.21	5.12	-- 1938	--	432.8	.164	--	--	--	ISWS
	do	do	do	--	--	June 1958	20	335.3	.127	52.35	.94	1,071.79	
24-44a	Panama Lake	Trib. of Indian Creek	Panama, Ill.	.85	.84	-- 1928	--	177.8	.536	--	--	--	ISWS
	do	do	do	--	--	Aug. 1958	30	151.9	.458	48.2	1.01	1,130	
24-45	Power Farms Ponds	Trib. of Sangamon River	Cantrall, Ill.	.668	.666	-- 1940	--	4.2	.011	--	--	--	ISWS
	do	do	do	--	--	July 1952	12	1.3	.003	54.9	.36	430	
24-46	Raccoon Lake	Raccoon Creek	Centralia, Ill.	48.4	47.3	-- 1943	--	4,496.3	.152	--	--	--	ISWS
	do	do	do	--	--	Sept. 1959	16	4,143.6	.140	39.7	.47	406	
24-47	Robinson Pond	Terre Creek	Jacksonville, Ill.	.314	.304	-- 1900	--	47.1	.277	--	--	--	ISWS
	do	do	do	--	--	July 1952	52	35.6	.209	46.8	.70	713.51	
24-48	Salem City	Trib. of Crooked Creek	Salem, Ill.	4.02	3.90	-- 1912	--	597.86	.233	--	--	--	ISWS
	do	do	do	--	--	Aug. 1960	48	530.88	.207	40.8	.36	320	
24-49a	Virginia	Job's Creek	Virginia, Ill.	.828	.799	-- 1933	--	156	.345	--	--	--	ISWS
	do	do	do	--	--	-- 1950	17	116	.260	*40	2.70	2,352	
24-50	Walton Club Lake	Long Branch	Litchfield, Ill.	2.72	2.67	-- 1862	--	376.3	.272	--	--	--	ISWS
	do	do	do	--	--	July 1959	97	187.2	.136	48.4	.73	769.5	
24-51	Lock and Dam 26	Mississippi River	Alton, Ill.	171,470	--	May 1938	--	395,000	--	--	--	--	CE
	do	do	do	--	--	May 1945	7.1	390,200	--	--	--	--	
	do	do	do	--	--	Dec. 1945	.6	--	--	--	--	--	
	do	do	do	--	--	May 1946	.4	381,200	--	--	--	--	
	do	do	do	--	--	Oct. 1947	1.4	408,200	--	--	--	--	
	do	do	do	--	--	Apr. 1959	11.5	343,900	--	--	--	--	
24-52a	Pool No. 22	do	Saverton, Mo.	137,500	--	July 1938	--	93,858	--	--	--	--	CE
	do	do	do	--	--	Dec. 1954	16.33	85,231	.0017	--	.006	--	
	do	do	do	--	--	Dec. 1969	15	2/102,362	.0018	--	--	--	

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UPPER MISSISSIPPI RIVER BASIN (FAIRPORT TO LOUISIANA)
Iowa, Skunk, and Des Moines River Basins

25-1	Pool No. 19 (Lake Cooper, Keokuk Dam)	Mississippi River	Keokuk, Iowa	119,000	—	— 1913	—	479,550	—	—	—	—	CE
	do	do	do	—	—	June 1928	15	370,300	—	—	—	—	
	do	do	do	—	—	June 1938	10	337,000	—	—	—	—	
	do	do	do	—	—	June 1946	8	312,216	—	—	—	—	
25-2	Upper Pine	Pine Creek	Eldora, Iowa	13.9	13.8	May 1934	—	660	.145	—	—	—	SCS
	do	do	do	—	—	Sept. 1947	13.3	452	.099	*60	1.14	*1,490	
25-3	Lake Calhoun	Fitch Creek	Galva, Ill.	13.1	13.0	Sept. 1924	—	c/425	—	—	—	—	SWS
	do	do	do	—	—	Aug. 1936	11.9	273	—	—	.977	1,190	
	do	do	do	—	—	July 1947	11.0	112	—	56	1.12	1,370	
25-4	Carthage	Long Creek	Carthage, Ill.	2.94	2.88	Mar. 1926	—	406.3	—	—	—	—	SWS
	do	do	do	—	—	Aug. 1949	23.4	308.2	—	*50	1.45	1,980	
25-5	McCraney Creek New Desilting Basin	McCraney Creek	Kinderhook, Ill.	52.0	50.2	Dec. 1936	—	*2,400	—	—	—	—	SCS
	do	do	do	—	—	Dec. 1939	3	*1,770	—	*85	4.18	7,760	
	do	do	do	—	—	— 1941	2	*1,666	—	*85	1.06	1,960	
25-6	Pine Lake	Pine Creek	Eldora, Iowa	15.34	15.26	— 1924	—	738	*.148	—	—	—	SCS
	do	do	do	—	—	Winter 1932	8	552	*.111	*60	1.52	*1,990	
25-7	Hadley Creek Old Desilting Basin	Hadley Creek	New Canton, Ill.	77.0	d/72.7	— 1921	—	3,000	*.067	—	—	—	SCS
	do	do	do	—	—	— 1936	15	1,845	*.062	*85	1.06	1,960	
25-8	Hadley Creek New Desilting Basin	do	do	77.0	d/72.7	Dec. 1936	—	3,080	*.068	—	—	—	SCS
	do	do	do	—	—	Dec. 1939	3	2,556	*.057	*85	2.61	6,460	
25-9	Kiser Creek Desilting Basin	Kiser Creek	do	66.0	e/59.6	Dec. 1936	—	*2,800	*.073	—	—	—	SCS
	do	do	do	—	—	Dec. 1939	3	*2,390	*.059	*85	2.85	5,280	
25-10	Beeds Lake	Unnamed	Hampton, Iowa	31.8	31.6	— 1935	—	1,156	*.069	—	—	—	SCS
	do	do	do	—	—	— 1946	11	1,070	*.064	*85	.26	340	
25-11	C R I. & P RR Res.	Trib. of Big Creek	Madrid, Iowa	2.36	2.32	— 1903	—	43	*.069	—	—	—	SCS
	do	do	do	—	—	— 1918	15	25	*.040	*70	.476	786	
25-12a	Fairfield No. 3	Crow Creek	Fairfield, Iowa	2.05	2.00	— 1927	—	207	*.323	—	—	—	SCS
	do	do	do	—	—	— 1934	7	166	*.212	*51.6	2.96	3,327	
	do	do	do	—	—	July 1953	19	133	*.198	51.6	.775	893	
25-13	Springbrook	Spring Brook	Guthrie Center, Iowa	2.1	2.1	— 1936	—	185	*.386	—	—	—	SCS
	do	do	do	—	—	— 1946	10	172	*.359	*50	.638	695	
25-14	Pool No. 16	Mississippi River	Muscatine, Iowa	99,400	—	Mar. 1938	—	113,370	—	—	—	—	CE
	do	do	do	—	—	Nov. 1949	11.7	106,367	—	—	—	—	
25-15	Pool No. 20	do	Canton, Mo.	134,300	—	Oct. 1937	—	89,830	—	—	—	—	CE
	do	do	do	—	—	Nov. 1950	13.1	87,740	—	—	—	—	
25-16	Bloomfield	Unnamed	Bloomfield, Iowa	2.25	2.13	Sept. 1937	—	896	*.464	—	—	—	SCS
	do	do	do	—	—	Sept. 1951	14.0	831	*.414	*60	2.16	2,823	
25-17	Pool No. 17	Mississippi River	New Boston, Ill.	99,600	—	Aug. 1938	—	70,800	—	—	—	—	CE
	do	do	do	—	—	Mar. 1954	15.6	69,350	—	—	.008	—	
25-18	Pool No. 21	do	Quincy, Ill.	135,000	—	July 1938	—	78,040	—	—	—	—	CE
	do	do	do	—	—	Mar. 1954	15.7	69,570	—	—	.004	—	
25-19a	Coralville	Iowa River	Iowa City, Iowa	3,115	3,076	Sept. 1958	—	492,000	.47	—	—	—	CE
	do	do	do	—	—	Jan. 1964	5.33	485,400	.46	40	.402	350.2	
	do	do	do	—	—	Apr. 1968	4.33	480,110	.46	45	.397	443.2	

UPPER MISSISSIPPI RIVER BASIN (PRAIRIE DU CHIEN TO ROCK ISLAND) AND LAKE MICHIGAN DRAINAGE
Rock and Wapsipinicon River Basins

26-1a	Pool No. 15	Mississippi River	Rock Island, Ill.	88,500	—	Mar. 1934	—	39,432	—	—	—	—	CE
	do	do	do	—	—	Aug. 1938	4.5	38,566	—	—	.002	—	
	do	do	do	—	—	Nov. 1944	6.2	38,229	—	—	.001	—	
	do	do	do	—	—	Dec. 1946	2.1	39,226	—	—	-.005	—	
	do	do	do	—	—	Nov. 1948	1.9	37,643	—	—	.009	—	
	do	do	do	—	—	Nov. 1950	2.0	37,882	—	—	-.002	—	
	do	do	do	—	—	Nov. 1952	2.0	37,086	—	—	.004	—	
26-2	Backbone Lake (Forestville Lake)	Maquoketa River	Strawberry Pt., Iowa	116	116	July 1934	—	608	—	—	—	—	SCS
	do	do	do	—	—	Feb. 1942	7.6	539	—	—	.078	127	
	do	do	do	—	—	Feb. 1949	7.0	473	—	75.1	.082	134	
26-3	Pool No. 11	Mississippi River	Dubuque, Iowa	81,600	—	Apr. 1938	—	171,666	—	—	—	—	CE
	do	do	do	—	—	Feb. 1953	14.8	154,526	—	—	.014	—	

UPPER MISSISSIPPI RIVER BASIN (ST. PAUL TO PRAIRIE DU CHIEN)
Wisconsin, Root, Chippewa, and St. Croix River Basins

27-1	Elk Creek Lake	Elk Creek	Eau Claire, Wisc.	60	60	— 1926	—	683	*.018	—	—	—	SCS
	do	do	do	—	—	Oct. 1941	15	497	*.012	*70	.252	384	
27-2	Ettrick Mill Pond	N. Br. Beaver Creek	Ettrick, Wisc.	50.75	50.70	— 1871	—	127	—	—	—	—	SCS
	do	do	do	—	—	June 1939	68	46	—	*80	.023	40	
27-3	Marinuka (Davis Lake)	Beaver Creek	Galesville, Wisc.	138.6	138.2	— 1887	—	1,677	*.022	—	—	—	SCS
	do	do	do	—	—	June 1939	72	683	*.009	72.5	.100	158	
27-4	Prairie du Sac	Wisconsin River	Prairie du Sac, Wisc.	8,900	f/600	— 1914	—	100,000	—	—	—	—	CE
	do	do	do	—	—	— 1933	19	91,851	—	*90	.717	1,460	

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a/ Conservation Pool.
b/ All 31 ranges show scour, partially due to removal of borrow material.
c/ Spillway raised 3.69 ft. in 1946. Original capacity was 285.6 ac.-ft. All sedimentation and storage loss data based on higher spillway elevation.

d/ Excludes 3.8 sq. mi. Mississippi River bottom land.
e/ Excludes 5.8 sq. mi. Mississippi River bottom land.
f/ Flow from 8,300 sq. mi. of drainage area passes through power dams, which act as silt traps.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	UPPER MISSISSIPPI RIVER BASIN (ST. PAUL TO PRAIRIE DU CHIEN) WISCONSIN, ROOT, CHIPPEWA, AND ST. CROIX RIVER BASIN (Continued)												
27-5	Pool No. 5A	Mississippi River	Winona, Minn. - Wisc.	59,100	--	July 1936	--	30,000	--	--	—	—	CE
	do	do	do	--	--	Feb. 1945	9.6	28,690	--	*90	—	—	
27-6a	D4-1 - Fishbaugher	Trib. S. E. Willow Creek	Preston, Minn.	1.31	1.29	Nov. 1956	--	168.7	.474	--	--	—	SCS
	do	do	do	--	--	Mar. 1960	3.4	166.5	.468	*70	0.51	778	
	do	do	do	--	--	Apr. 1964	4.1	164.1	.461	*70	.43	656	
27-7	Franklin Farm Pond	Trib. of Spring Creek	Red Wing, Minn.	1.188	1.181	May 1958	--	110.5	*.365	--	—	--	SCS
	do	do	do	--	--	June 1962	4.1	104.56	*.327	*65	1.23	1,761	
27-8	Frieheit Farm Pond	Trib. of Zumbro River	Zumbro Falls, Minn.	.269	.268	Aug. 1955	—	14.27	*.166	—	—	--	SCS
	do	do	do	--	—	May 1962	6.8	13.29	*.155	49.5	.52	560	
27-9	Stelplaugh Farm Pond	Trib. of Corey Creek	Money Creek, Minn.	.231	.230	Sept. 1957	--	19.09	*.313	—	—	—	SCS
	do	do	do	--	—	May 1962	4.7	18.04	*.296	*65	.96	1,359	
27-10	Wahlfiel Farm Pond	Trib. of Zumbro River	Millville, Minn.	.386	.384	July 1955	—	27.98	*.227	—	—	--	SCS
	do	do	do	—	--	May 1962	6.8	26.71	*.217	*55	.49	587	
27-11	Wold Farm Pond	Trib. of Crooked Creek	Spring Grove, Minn.	.194	.193	Aug. 1954	—	10.50	*.157	--	--	—	SCS
	do	do	do	--	--	Jan. 1962	7.3	10.03	*.150	51.86	.331	376	
27-12	FD-28 Structure East Willow Creek Watershed	Trib. of Root River	Preston, Minn.	.436	.433	Oct. 1954	—	56.79	*.444	—	—	—	SCS
	do	do	do	--	--	June 1962	7.7	55.18	*.431	*65	.46	480	
27-13	E-3 Mensink	Trib. of E.E. Willow Creek	do	3.16	3.10	May 1956	--	292.2	.340	--	—	—	SCS
	do	do	do	—	—	Mar. 1960	3.83	291.0	.338	*90	.11	120	
	do	do	do	—	—	Apr. 1964	4.08	287.2	.334	*90	.30	330	
	UPPER MISSISSIPPI RIVER BASIN (ABOVE ST. PAUL)												
28-	LAKE SUPERIOR AND LAKE OF THE WOODS AREA (IN MINNESOTA)												
29-	RED RIVER OF THE NORTH BASIN												
30-1	Lake Bronson	Two Rivers	Bronson, Minn.	439	438.5	Summer 1940	—	3,792	—	—	—	—	SCS
	do	do	do	--	—	Oct. 1950	10	3,626	—	30.94	.038	25.6	
30-2	Frazee	Otter Tail River	Frazee, Minn.	210	24	-- 1926	--	155	—	—	—	—	SCS
	do	do	do	—	—	May 1952	26	137.1	—	20	.029	12.6	
30-3	Hebron Dam	Trib. of Goose River	Hebron, N. Dak.	1.219	1.188	— 1935	--	130.69	*3.354	—	—	--	SCS
	do	do	do	--	—	Oct. 1955	20	107.29	*2.753	61	.98	875	
30-4	Dougherty Dam	N. Br. Forest River	Adams, N. Dak.	20.2	14.6	-- 1935	—	150.7	*.209	—	—	--	SCS
	do	do	do	--	—	Aug. 1957	22	139.6	*.194	25	.034	18.81	
30-5	Gustafson Farm Pond	Park River	do	3.755	3.670	-- 1941	--	38.70	*.284	—	—	--	SCS
	do	do	do	—	--	May 1955	14	33.36	*.245	*35	.101	76.99	
30-6	Osinner Dam	Trib. of Wild Rice River	Osinner, N. Dak.	.226	.222	-- 1936	--	12.92	*2.494	—	—	—	SCS
	do	do	do	--	—	Aug. 1956	20	10.29	*1.986	29	.59	372.6	
30-7	Madsen Farm Pond	Swan Creek	Wheatland, N. Dak.	27.76	27.76	-- 1939	—	22.82	*.026	—	—	—	SCS
	do	do	do	--	—	June 1956	17	19.10	*.022	*35	.0078	5.95	
30-8	Magnolia Dam	Buffalo Creek	do	12.16	11.72	-- 1908	--	157.92	*.406	—	—	—	SCS
	do	do	do	—	—	June 1956	48	127.40	*.328	*35	.052	39.44	
30-9	Mason Siding Dam	Rush River	Erie, N. Dak.	30.2	30.2	-- 1912	--	43.15	*.045	—	—	—	SCS
	do	do	do	--	—	June 1956	44	35.40	*.037	*35	.0058	4.44	
30-10	Melvin Bellerud Farm Pond	Park River	Adams, N. Dak.	1.125	1.121	-- 1942	--	16.78	*.412	—	—	—	SCS
	do	do	do	--	—	May 1955	13	14.47	*.355	*35	.1579	114.68	
30-11	Milton WPA Dam	do	Milton, N. Dak.	14.375	14.356	— 1934	—	66.59	*.128	—	—	--	SCS
	do	do	do	—	—	May 1955	21	46.19	*.089	*35	.0676	52.95	
30-12	Morby Dam	Trib. of Wild Rice River	Havana, N. Dak.	.183	.183	— 1934	—	5.227	*1.191	—	—	—	SCS
	do	do	do	--	—	Aug. 1956	22	4.467	*1.018	*45	.188	184.3	
30-13	Raleigh Dam	Dog Tooth Creek	Raleigh, N. Dak.	4.45	4.45	-- 1909	—	175.47	*.925	—	—	--	SCS
	do	do	do	--	—	July 1956	47	165.23	*.766	*35	.144	109.8	
30-14	Sioux Railroad Reservoir	Park River	Adams, N. Dak.	16.855	16.66	— 1911	—	88.37	*.145	—	—	—	SCS
	do	do	do	--	—	May 1955	44	69.16	*.113	*35	.026	18.80	
30-15	White Lake	Trib. of Wild Rice River	Havana, N. Dak.	37.0	21.08	-- 1938	—	1,895.6	—	—	—	—	SCS
	do	do	do	--	--	— 1957	19	1,808.8	—	32	.2167	151	
30-16	Baldhill Dam (Lake Ashtabula)	Sheyenne River	Valley City, N. Dak.	1/4,138	2/1,979	Dec. 1952	--	76,400	—	—	—	—	CE
	do	do	do	--	—	Jan. 1958	5.1	75,410	—	*90	.0982	192	
30-17	Homme Dam (Park River)	S. Br. Park River	Park River, N. Dak.	229	229	Jan. 1933	—	3,690	.206	—	—	—	CE
	do	do	do	—	—	Mar. 1938	5.2	3,382	.189	*90	.225	441	
	MISSOURI RIVER BASIN (NEBRASKA CITY TO HERMANN)												
31-1	Lake of the Ozarks (Bagnell Dam)	Osage River	Eldon, Mo.	14,000	13,900	Feb. 1931	--	2,087,223	.299	—	--	—	CE
	do	do	do	—	--	Oct. 1948	17.8	1,972,531	.283	59.2	.464	598	
31-2	Carl Chinquist	Trib. of West Nodaway River	Stanton, Iowa	.166	.163	June 1938	—	3/9.46	*.231	—	--	—	SCS
	do	do	do	—	—	May 1949	10.9	2.59	*.063	69.9	3.87	4,200	

31-3	L. S. Pudling	Trib. of Tarkio Creek	Westboro, Mo.	1.05	1.04	July	1939	—	3/31.80	*.132	—	—	—	SCS
	-do-	-do-	-do-	—	—	May	1949	9.8	1.93	*.008	62.5	2.93	3,900	
31-4	McDaniel Lake	Little Sac River	Springfield, Mo.	41.9	41.5	—	1929	—	3,452	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	June	1940	11	3,207	—	*60	.538	703	
31-5	Doniphan Co. Old Desilting Basin	Chase Creek	Blair, Kans.	1.62	1.58	—	1930	—	139.2	*.326	—	—	—	SCS
	-do-	-do-	-do-	—	—	June	1937	4/10.0	23.6	*.068	66.4	6.50	15,770	
31-6	Leavenworth Co. State Lake	Unnamed Trib.	Tonganoxie, Kans.	3.83	3.56	Sept.	1931	—	3,986	3.702	—	—	—	SCS
	-do-	-do-	-do-	—	—	Nov.	1947	16.1	3,771	3.564	61.45	2.53	3,386	
31-7	Lyon Co. State (Reading Lake)	-do-	Reading, Kans.	2.19	2/1.79	—	1935	—	1,899	*3.628	—	—	—	SCS
	-do-	-do-	-do-	—	—	Aug.	1939	4.0	1,870	*3.394	*60	2.73	3,568	
31-8	Martin Farm Lake	Osage River	Ottawa, Kans.	.18	.17	Nov.	1930	—	33	*.599	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct.	1937	6.9	30	*.508	*60	2.82	3,605	
31-9b	Mission Lake	Mission Creek	Horton, Kans.	8.15	7.76	May	1924	—	1,866	*1.025	—	—	—	ARS
	-do-	-do-	-do-	—	—	Apr.	1937	13	1,563	*.858	62.2	3.00	4,066	
	-do-	-do-	-do-	—	—	July	1954	17.2	1,161	*.449	53.3	2.66	3,326	
	-do-	-do-	-do-	—	—	Aug.	1967	13.1	1,051.5	*.599	58.5	.88	12.65	
31-10	Moran	S. Fk. Osage River	Moran, Kans.	5.35	5.28	Apr.	1913	—	365	*.130	—	—	—	SCS
	-do-	-do-	-do-	—	—	Sept.	1939	26.4	298	*.106	49.15	.477	511	
31-11	Lake Olathe	Cedar Creek	Olathe, Kans.	6.20	6.11	July	1932	—	721	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	June	1937	4.9	666	—	60.4	1.84	2,421	
	-do-	-do-	-do-	—	—	July	1949	12.1	488	—	57.6	2.41	3,023	
31-12	Richmond	Unnamed Trib.	Richmond, Kans.	2.17	2.07	—	1909	—	405	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct.	1937	28	289	—	*60	2.00	2,414	
31-13	Lampe Farm Pond	Trib. of Muddy Creek	Howe, Nebr.	.065	.064	Aug.	1942	—	3.00	*.232	—	—	—	SCS
	-do-	-do-	-do-	—	—	Dec.	1948	6.3	2.06	*.157	37.4	2.41	3,080	
31-14	E. W. Howell	Trib. of Tarkio Creek	Tarkio, Mo.	.509	.505	July	1936	—	3/33.7	*.303	—	—	—	SCS
	-do-	-do-	-do-	—	—	May	1949	6/6.9	.03	*.0003	72.5	9.66	15,250	
31-15	Allerton	South Chariton River	Allerton, Iowa	4.98	4.82	—	1913	—	511	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	Nov.	1939	25.5	402	—	*60	.896	1,170	
31-16	Centerville No. 2	Manson's Branch	Centerville, Iowa	2.70	2.62	—	1926	—	1,111	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	—	1937	11	1,090	—	*60	2.12	2,760	
31-17	Lake of Three Fires	E. Fk. 102 River	Bedford, Iowa	6.15	5.97	July	1936	—	1,232	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	Feb.	1950	13.6	860	—	—	4.58	—	
31-18	Dankey Reservoir	Longs Creek	Johnson, Nebr.	.703	.699	—	1932	—	13.4	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	—	1936	4	10.7	—	*65	.964	1,365	
31-19	Hadley Reservoir	Trib. of Nemaha River	Brock, Nebr.	.12	.115	—	1947	—	11.37	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	—	1956	9	10.35	—	*65	.962	1,334	
31-20a	Schneider Reservoir	Long Branch	Johnson, Nebr.	.188	.184	—	1952	—	10.4	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	—	1956	4	6.23	—	*65	5.65	8,000	
31-21	Coe	Unnamed Trib.	Blue Rapids, Kans.	.31	.30	June	1946	—	6.92	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	Mar.	1955	8.8	4.05	—	67.22	1.10	1,610	
31-22	Droege	-do-	Osage City, Kans.	.4	.4	Mar.	1944	—	3/12.89	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	Sept.	1955	11.5	8.4	—	60	.97	1,267	
31-23	Flinner	-do-	Leavenworth, Kans.	.66	.63	Nov.	1936	—	81.6	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	Aug.	1957	20.7	26.1	—	*60	4.22	5,515	
31-24	Honey Creek No. A-2	Trib. of Honey Creek	Russell, Iowa	.278	.276	Oct.	1956	—	52.7	*.750	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct.	1958	2.00	52.3	*.744	66	.71	1,000	
	-do-	-do-	-do-	—	—	Sept.	1959	.92	52.2	*.742	66	.74	1,100	
	-do-	-do-	-do-	—	—	Jan.	1961	1.33	52.2	*.742	66	0	0	
31-25	Honey Creek No. A-4	-do-	-do-	.355	.346	Aug.	1957	—	64.9	*.724	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct.	1958	1.17	63.5	*.708	66	3.52	5,100	
	-do-	-do-	-do-	—	—	Aug.	1959	.83	63.3	*.706	66	.71	1,000	
	-do-	-do-	-do-	—	—	Jan.	1961	1.42	63.3	*.706	66	0	0	
31-26	Honey Creek No. F-1	-do-	-do-	1.213	1.200	Nov.	1955	—	184	*.600	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct.	1958	2.92	181	*.590	66	.77	1,100	
	-do-	-do-	-do-	—	—	Oct.	1959	1.00	179	*.584	66	2.02	2,900	
	-do-	-do-	-do-	—	—	Jan.	1961	1.25	179	*.584	66	0	0	
31-27	Honey Creek No. E-1	Trib. of Honey Creek	Russell, Iowa	.478	.470	July	1955	—	142	*1.175	—	—	—	SCS
	-do-	-do-	-do-	—	—	June	1958	2.92	140	*1.158	66	1.35	1,900	
	-do-	-do-	-do-	—	—	Sept.	1959	1.25	138	*1.142	66	2.61	3,800	
	-do-	-do-	-do-	—	—	Jan.	1961	1.33	138	*1.142	66	0	0	
31-28	Honey Creek No. I-1	-do-	-do-	.503	.495	Nov.	1955	—	106	*.833	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct.	1958	2.92	105	*.826	66	.85	1,200	
	-do-	-do-	-do-	—	—	Sept.	1959	.92	104	*.818	66	2.22	3,200	
	-do-	-do-	-do-	—	—	Jan.	1961	1.33	104	*.818	66	0	0	
31-29	Miller Ranch	Unnamed Trib.	Miller, Kans.	.71	.70	Nov.	1936	—	52.72	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	Sept.	1955	18.8	37.83	—	52.7	1.13	1,297	
31-30	Holte	Trib. of Wolf River	Hiawatha, Kans.	.42	.42	May	1951	—	3/7.55	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct.	1955	4.0	5.67	—	68.43	1.12	1,669	
31-31	Prairie Lake	Unnamed Trib.	Holton, Kans.	1.69	1.60	Oct.	1947	—	721.7	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct.	1955	8.0	653.1	—	54.3	6.12	7,197	
31-32	Wyhart	-do-	Effingham, Kans.	.16	.15	Oct.	1949	—	3/49.4	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct.	1957	7.9	46.3	—	*60	2.4	3,136	
31-33	Sabetha Lake	Deer Creek Trib. of Nemaha	Sabetha, Kans.	9.17	8.99	Jan.	1936	—	1,956	.604	—	—	—	ARS
	-do-	-do-	-do-	—	—	June	1951	15.5	1,310	.544	56.7	4.48	5,337	
	-do-	-do-	-do-	—	—	Aug.	1952	1.2	1,234	.513	53.7	7.06	6,980	
	-do-	-do-	-do-	—	—	Oct.	1953	1.1	1,259	.523	58.0	7/-2.52	—	
	-do-	-do-	-do-	—	—	Apr.	1955	1.5	1,206	.501	54.1	3.93	379	
	-do-	-do-	-do-	—	—	Apr.	1956	1.0	1,205	.501	55.0	.11	1,720	
	-do-	-do-	-do-	—	—	Apr.	1958	2.0	1,200	.499	56.2	.28	1,400	
	-do-	-do-	-do-	—	—	July	1960	2.3	1,117	.464	54.6	4.03	3,537	

1/ Total drainage area (exclusive of closed Devils Lake Basin with drainage area of 3,940 sq. mi.).
2/ About 2,190 sq. mi. of the total drainage area shown is also noncontributing.
3/ Water supply pool capacity. Reservoir has greater capacity at spillway crest elevation.
4/ Water diverted from basin after June, 1930.
5/ Excluding area of lake and 0.31 sq. mi. above stock pond.
6/ Reservoir silted full Dec. 1936; Crest raised June 1937; silted full again Dec. 1940; crest raised again May 1945; silted full again May 1949. Age computed as 6.9 yr.
7/ Minus (-) indicates scour or compaction (treated as negative sediment).
* Estimated or assumed.

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SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

MISSOURI RIVER BASIN (NEBRASKA CITY TO HERMAN) (Continued)

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
31-[illegible]	Sutter	Unnamed Trib.	Effingham, Kans.	.17	.16	Jan. 1950	--	1/53.2	--	--	--	--	SCS
	do	do	do	--	--	Oct. 1957	7.7	50.86	--	*60	1.88	2,457	
31-35	Shirley Pond	do	Lawrence, Kans.	.18	.18	Mar. 1939	--	20.86	--	--	--	--	SCS
	do	do	do	--	--	Nov. 1956	17.7	19.05	--	86.7	.56	1,057.5	
31-36	Trentman	do	Fairview, Kans.	.18	.18	May 1947	--	1/3.78	--	--	--	--	SCS
	do	do	do	--	--	Oct. 1955	8.4	2.42	--	62.02	.90	1,201	
31-37	Thorne	Unnamed	Effingham, Kans.	1.17	1.16	Sept. 1946	--	1/29.13	--	--	--	--	SCS
	do	do	do	--	--	Aug. 1957	11	17.7	--	*60	.90	1,176	
31-38b	Ashland Reservoir	Brushy Creek	Ashland, Mo.	3.78	3.75	Apr. 1937	--	280.48	--	--	--	--	ARS
	do	do	do	--	--	Nov. 1949	12.6	212.01	--	69	1.44	2,178	
	do	do	do	--	--	Apr. 1951	1.4	208.14	--	68	.73	807	
	do	do	do	--	--	July 1955	4.3	202.23	--	*68	.36	543	
	do	do	do	--	--	June 1962	6.9	186.07	--	69.4	.62	1,038	
	do	do	do	--	--	July 1968	6.1	171.52	--	64.7	.62	614	
31-39	Higginsville Old City Lake	Trib. of Davis Creek	Higginsville, Mo.	2.728	2.633	Sept. 1924	--	520.0	--	--	--	--	ARS
	do	do	do	--	--	July 1964	39.8	304.0	--	55.94	2.061	2,511	
31-40	[illegible]	Trib. of Brush Creek	do	.334	2/.181	Oct. 1950	--	32.26	--	--	--	--	ARS
	do	do	do	--	--	Aug. 1964	13.8	25.55	--	58.74	2.686	3,436	
31-41	Mitchell	Trib. of Washington Creek	Lawrence, Kans.	.119	.117	Oct. 1949	--	7.94	--	--	--	--	SCS
	do	do	do	--	--	June 1962	12.67	6.73	--	56.8	.85	1,051	
31-42	McGee	do	Clinton, Kans.	.61	.58	Jan. 1950	--	6.77	--	--	--	--	SCS
	do	do	do	--	--	May 1962	12.4	6.26	--	47.9	.07	73	
31-43	Kennedy	Trib. of Wakarusa River	Richland, Kans.	.23	.22	Apr. 1937	--	61.19	--	--	--	--	SCS
	do	do	do	--	--	May 1962	25.1	56.27	--	46.7	1.27	1,294	
31-44	[illegible]	do	Eudora, Kans.	.125	.122	May 1955	--	1/7.52	--	--	--	--	SCS
	do	do	do	--	--	June 1962	7.1	5.68	--	56.2	2.13	2,609	
31-45	Lake Elbo	Trib. of Kansas River	Manhattan, Kans.	3.20	3.14	Apr. 1949	--	206	.303	--	--	--	SCS
	do	do	do	--	--	Sept. 1965	16.33	176	.259	75	.58	967	
31-46	Rokey	Trib. of Nemaha River	Sabetha, Kansas	.284	.280	May 1956	--	1/13.97	--	--	--	--	SCS
	do	do	do	--	--	Apr. 1962	5.9	11.32	--	50.7	1.61	1,777	
31-47	Callahan Cr. Watershed (C-1)	Barclay Branch	Columbia, Mo.	5.625	5.515	Apr. 1967	--	1,017.07	--	--	--	--	ARS
	do	do	do	--	--	Aug. 1967	.25	1,010.8	--	41.6	4.57	4,144	
	do	do	do	--	--	Aug. 1969	2	989.3	--	53	1.96	2,379	
	do	do	do	--	--	July 1971	1.9	974.9	--	58.2	1.38	2,059	
31-48	Wakefield	Trib. Marias Des Cygnes	Mound City, Kans.	.83	.82	-- 1936	--	19.67	.05	--	--	--	SCS
	do	do	do	--	--	July 1967	31	11.06	.03	*60	.34	444	
31-49	Pool	Trib. Elk Creek	Circleville, Kans.	.16	.16	Oct. 1958	--	18.07	.39	--	--	--	SCS
	do	do	do	--	--	July 1968	9.75	16.18	[illegible]	*60	1.19	1,555	
31-50	Richter	Trib. Straight Creek	Holton, Kans.	.28	.27	Fall 1957	--	64.36	.80	--	--	--	SCS
	do	do	do	--	--	July 1968	11	59.98	.74	*60	1.47	1,981	
31-51	[illegible]	do	do	.23	.23	July 1956	--	31.26	.47	--	--	--	SCS
	do	do	do	--	--	July 1968	12	27.3	.41	*60	1.43	1,869	
31-52	Rogers	Big Sugar	Garrett, Kans.	1.17	1.16	-- 1936	--	22.8	.069	--	--	--	SCS
	do	do	do	--	--	June 1967	31	14.1	.03	67	.74	350	
31-53	Lemon	Trib. of Elm Creek	Parker, Kans.	.19	.19	June 1961	--	6.7	.08	--	--	--	SCS
	do	do	do	--	--	July 1967	6	6.16	.08	60	.47	614	
31-54	[illegible] Reservoir	Trib. Bull Creek	Gardner, Kans.	.77	.69	July 1960	--	204.3	.607	--	--	--	SCS
	do	do	do	--	--	Sept. 1970	10.2	191.1	.568	*60	1.88	2,457	
31-55	Oberhelman Pond	do	Edgerton, Kans.	.57	.50	Sept. 1960	--	14.883	.061	--	--	--	SCS
	do	do	do	--	--	Sept. 1970	10	11.03	.045	*65	.77	1,090	
31-56	Richmond Lake	Dry Branch	Richmond, Kans.	.86	.84	-- 1955	--	232.86	.68	--	--	--	SCS
	do	do	do	--	--	July 1967	12	222.06	.65	*60	1.07	1,398	
31-57	Hall Pond	Trib. Little Sugar	Farlinville, Kans.	.38	.37	Feb. 1955	--	46.22	.25	--	--	--	SCS
	do	do	do	--	--	July 1967	12	42.87	.24	*60	.76	993	
31-58	Johnson Pond	do	Blue Mound, Kans.	.94	.93	-- 1936	--	24.03	.05	--	--	--	SCS
	do	do	do	--	--	July 1967	31	17.1	.039	*60	.24	313	

SMOKY HILL AND LOWER REPUBLICAN RIVER BASINS

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA TOTAL	DRAINAGE AREA NET	DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO	SPECIFIC WEIGHT (DRY)	AC.-FT.	TONS	AGENCY SUPPLYING DATA
32-1	Ottawa County State Lake	Sand Creek	Bennington, Kans.	20.47	20.26	-- 1929	--	1,001	--	--	--	--	SCS
	do	do	do	--	--	Apr. 1937	8.0	930	--	--	.438	--	
32-2	Sheridan County State Lake	Saline River	Quinter, Kans.	493	463	Aug. 1937	--	777	--	--	--	--	BR
	do	do	do	--	--	Aug. 1948	10.8	636	--	66.5	.0481	98.6	
32-3a	Kanopolis	Smoky Hill River	Kanopolis, Kans.	7,860	3/2,560	July 1946	--	446,000	--	--	--	--	CE
	do	do	do	--	--	Sept. 1960	14.2	436,320	--	*50.0	.27	294	
32-4	Allington Reservoir	Sicily Creek	Beatrice, Nebr.	.52	.512	-- 1936	--	33.106	--	--	--	--	SCS
	do	do	do	--	--	-- 1956	20	14.704	--	*65	1.77	2,506	
32-5	Barnard Farm Reservoir	Indian Creek	do	.675	.661	Aug. 1947	--	30.5	--	--	--	--	SCS
	do	do	do	--	--	May 1956	8.75	22.22	--	*65	1.400	1,982	
32-6	[illegible] Reservoir	Trib. of Little Blue River	Hubbell, Nebr.	.175	.171	-- 1937	--	8.098	--	--	--	--	SCS
	do	do	do	--	--	-- 1958	21	2.301	--	*65	1.566	2,217	

32-7	Fling Rebake	do	do	.108	.103	—	1945	—	18.486	—	—	—	—	SCS
	do	do	do	—	—	—	1958	13	13.852	—	*65	3.44	4,870	
32-8	Hanmire Reservoir	do	Reynolds, Nebr.	—	—	—	1948	—	5.963	—	—	—	—	SCS
	do	do	do	—	—	—	1958	10	3.641	—	*65	2.56	3,684	
32-9	Hapke Reservoir	do	Gladstone, Nebr.	.306	.302	—	1913	—	9.806	—	—	—	—	SCS
	do	do	do	—	—	—	1958	45	5.179	—	*65	.337	477	
32-10	Hahne Reservoir No. 1	Bloody Run	Virginia, Nebr.	.422	.404	—	1899	—	70.7	—	—	—	—	SCS
	do	do	do	—	—	—	1956	57	30.8	—	*70	1.66	2,531	
32-11	Hahne Reservoir No. 2	do	do	.102	.099	—	1946	—	9.67	—	—	—	—	SCS
	do	do	do	—	—	—	1956	10	8.06	—	*65	1.58	2,237	
32-12	Omer Reservoir	Trib. of Little Blue River	Gladstone, Nebr.	.292	.283	—	1946	—	5.987	—	—	—	—	SCS
	do	do	do	—	—	—	1958	12	3.735	—	*65	.537	746	
32-13	Peithmann Reservoir	do	Hubbell, Nebr.	.216	.212	—	1950	—	9.934	—	—	—	—	SCS
	do	do	do	—	—	—	1958	8	5.576	—	*65	2.523	3,572	
32-14	Uhl Reservoir	do	do	.198	.187	—	1946	—	12.276	—	—	—	—	SCS
	do	do	do	—	—	—	1958	12	6.522	—	*65	2.508	3,551	
32-15a	Wendy Hereford Ranch	Unnamed Trib.	Lincoln, Kans.	1.20	1.19	Nov.	1936	—	41.6	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1955	19	23.6	—	*60	.79	1,032	
32-16a	Dougherty	do	Russell, Kans.	.97	.96	Sept.	1947	—	22.5	.435	—	—	—	SCS
	do	do	do	—	—	Sept.	1955	8	16.1	.311	*60	.83	1,085	
32-17	Lost Creek B-1	Trib. of Lost Creek	Lincoln, Kans.	1.56	1.52	Jan.	1957	—	1/92.43	—	—	—	—	SCS
	do	do	do	—	—	July	1962	5.5	86.67	—	67.1	.69	708	
32-18	Jepsen	Trib. of Spillman Creek	do	1.0	1.0	May	1953	—	1/47.73	—	—	—	—	SCS
	do	do	do	—	—	July	1962	9.2	39.46	—	61.2	.90	1,200	
32-19	Wilson Bros.	Trib. of Saline River	do	.22	.21	Sept.	1950	—	1/9.51	—	—	—	—	SCS
	do	do	do	—	—	July	1962	11.8	8.20	—	*60	.48	627	
32-20	Zoulek	do	do	.222	.220	Nov.	1953	—	1/16.65	—	—	—	—	SCS
	do	do	do	—	—	July	1962	8.75	15.23	—	70.6	.73	1,122	
32-21	Mestrow	Trib. of Timber Creek	Vliets, Kans.	.16	.15	July	1956	—	1/15.29	—	—	—	—	SCS
	do	do	do	—	—	May	1962	5.8	14.14	—	80.9	1.33	2,344	
32-22	Cornelison	Trib. of Black Vermillion	do	.125	.120	June	1956	—	1/8.16	—	—	—	—	SCS
	do	do	do	—	—	May	1962	5.9	5.84	—	63.6	3.25	4,500	
32-23	Brage	Unnamed Trib.	Bern, Kans.	.35	.34	July	1958	—	1/27.30	—	—	—	—	SCS
	do	do	do	—	—	May	1962	3.8	25.45	—	59.4	1.44	1,863	
32-24	Hobson	Trib. of Holland Creek	Elmo, Kans.	.156	.152	June	1956	—	1/10.51	—	—	—	—	SCS
	do	do	do	—	—	June	1962	6	9.68	—	75.6	.98	1,515	
32-25	Jacobson	Trib. of Turkey Creek	Dayton, Kans.	.211	.206	July	1950	—	11.78	—	—	—	—	SCS
	do	do	do	—	—	June	1962	12	5.16	—	62.9	2.67	3,658	
32-26	Frey	do	Elmo, Kans.	.128	.127	Dec.	1954	—	1.78	—	—	—	—	SCS
	do	do	do	—	—	June	1962	7.6	1.47	—	55.7	.31	376	
32-27	Roch	Trib. of Smoky Hill River	Navarre, Kans.	.560	.544	Oct.	1954	—	4.88	—	—	—	—	SCS
	do	do	do	—	—	July	1962	7.75	2.71	—	53.4	.51	593	
32-28	Rudd	Trib. of Dutch Creek	Centralia, Kans.	.64	.63	Oct.	1953	—	1/74.07	—	—	—	—	SCS
	do	do	do	—	—	May	1962	8.6	65.34	—	53.2	1.62	1,878	
32-29	Harlan County	Republican River	Republican City, Nebr.	20,753	9,277	July	1951	—	850,000	—	—	—	—	CE
	do	do	do	—	—	Sept.	1962	11.25	837,900	—	72	.116	182	
32-30	Grant Tonder	Trib. of Saline River	Beverly, Kans.	.99	.96	Mar.	1952	—	1/71.9	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1965	13.6	60.9	—	*72	.84	1,317	
32-31	Holben Pond	Trib. Elk Creek	Lenora, Kans.	1.84	1.83	Oct.	1957	—	32	.444	—	—	—	SCS
	do	do	do	—	—	Aug.	1970	12.8	24.59	.356	*75	.32	523	
32-32	Finney Pond	Trib. Baird Creek	Simpson, Kans.	1.39	1.37	Oct.	1960	—	122.5	1.003	—	—	—	SCS
	do	do	do	—	—	June	1970	9.7	116	.951	*80	.53	903	
32-33	Christler Pond	Trib. Saline River	Victoria, Kans.	1.01	.26	Dec.	1956	—	99.66	1.055	—	—	—	SCS
	do	do	do	—	—	July	1970	13.6	56.93	1.02	*60	.77	1,004	
32-34	Cheney Pond	Trib. Dry Creek	Delphos, Kans.	1.08	.92	Dec.	1956	—	108.11	.939	—	—	—	SCS
	do	do	do	—	—	June	1970	13.5	99.11	.862	*60	.72	967	
32-35	Bruna Pond	Trib. Little Blue	Washington, Kans.	1.20	1.16	Apr.	1956	—	84.033	.395	—	—	—	SCS
	do	do	do	—	—	June	1970	13.3	78.19	.36	*75	.51	831	
32-36	Burger Pond	Trib. Buffalo Creek	Randall, Kans.	.59	.57	June	1953	—	22.68	.38	—	—	—	SCS
	do	do	do	—	—	June	1970	17	11.51	.195	*65	1.15	1,632	
32-37	Duvall Pond	Trib. Saline River	Bunker Hill, Kans.	1.77	1.41	Dec.	1960	—	104.86	.855	—	—	—	SCS
	do	do	do	—	—	July	1970	9.6	103.17	.846	*75	.12	204	
32-38	Jenneman Pond	Trib. of Wolf Creek	Prairie View, Kans.	1.31	1.1	Nov.	1954	—	100	1.60	—	—	—	SCS
	do	do	do	—	—	July	1970	15.7	91	1.54	*65	.52	733	
32-39	Jones Pond	Trib. Smoky Hill River	Arnold, Kans.	.93	.92	Dec.	1944	—	23.42	.556	—	—	—	SCS
	do	do	do	—	—	Aug.	1970	25.7	21.25	.506	*80	.09	158	
32-40	King Pond	Trib. Mortimer Creek	Glasco, Kans.	1.09	.97	Nov.	1960	—	47.3	.493	—	—	—	SCS
	do	do	do	—	—	June	1970	9.6	45.3	.431	*65	.36	507	
32-41	Kinney Pond	Trib. Buffalo Creek	Mankato, Kans.	.77	.71	Sept.	1950	—	91.9	1.279	—	—	—	SCS
	do	do	do	—	—	June	1970	19.8	88.4	1.194	*65	.25	348	
32-42	Lee Pond	Trib. Saline River	Tescott, Kans.	.85	.82	Apr.	1952	—	152.4	1.868	—	—	—	SCS
	do	do	do	—	—	June	1970	18.2	144.3	1.784	*55	.41	492	
32-43	Lindsley Pond	Trib. Mill Creek	Morrowville, Kans.	.72	.65	Oct.	1960	—	39.2	.319	—	—	—	SCS
	do	do	do	—	—	June	1970	9.7	35.8	.291	*70	.53	811	
32-44	Lloyd Pond	Trib. Republican River	Scandia, Kans.	.85	.84	July	1932	—	20.15	.193	—	—	—	SCS
	do	do	do	—	—	July	1970	38	8.12	.078	*70	.38	575	
32-45	Lovell Pond	Beaver Creek	Franklin, Nebr.	2.16	2.08	July	1951	—	126.72	.977	—	—	—	SCS
	do	do	do	—	—	July	1970	19	95.86	.726	*65	.78	1,106	
32-46	Wallenkamp Pond	Trib. Saline River	Culver, Kans.	6.15	6.12	Apr.	1961	—	90.6	.368	—	—	—	SCS
	do	do	do	—	—	Aug.	1970	9.3	79.4	.324	*65	.20	277	
32-47	Worth Pond	Trib. Smoky Hill River	McCracken, Kans.	2.43	.91	Mar.	1955	—	96.83	.631	—	—	—	SCS
	do	do	do	—	—	July	1970	15.3	91.55	.614	*65	.38	537	
32-48	Raleigh Pond	Trib. Salt Creek	Agenda, Kans.	.90	.80	Mar.	1964	—	81.5	.653	—	—	—	SCS
	do	do	do	—	—	July	1970	6.3	79.4	.635	*60	.67	566	

1/ Water supply pool capacity. Reservoir has greater capacity at spillway crest elevation.
2/ Excludes conservation pool area and terraced area of watershed.
3/ 7,840 prior to closure of Cedar Bluff Dam Sept. 1950.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES) TOTAL	NET	DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN AC.-FT.	TONS	AGENCY SUPPLYING DATA
	SMOKY HILL AND LOWER REPUBLICAN RIVER BASINS (Continued)												
32-49	Sanger Pond	Trib. S. F. Solomon River	Harland, Kans.	2.52	2.32	Mar. 1954	—	332.12	3.519	--	—	—	SCS
	do	do	do	—	—	Aug. 1970	16.4	307.5	3.271	*65	0.65	917	
32-50	Shunise Pond	Trib. Rose Creek	Munden, Kans.	1.61	1.61	July 1954	—	12.896	.098	—	—	—	SCS
	do	do	do	—	—	July 1970	16	6.8	.050	*70	.26	361	
32-51	Scharle Pond	Trib. Mill Creek	Green, Kans.	.73	.67	Nov. 1960	—	127.1	1.088	—	—	—	SCS
	do	do	do	—	—	June 1970	9.6	123.3	1.053	*60	.59	707	
32-52	Wals Pond	Trib. Saline River	Ogallah, Kans.	3.93	3.8	Aug. 1958	—	69.32	.389	—	—	—	SCS
	do	do	do	—	—	Aug. 1970	12	63.64	.357	*60	.12	152	
32-53	Woolhoff Pond	Trib. Five Creek	Morganville, Kans.	.61	.59	June 1954	—	29.05	.331	—	—	—	SCS
	do	do	do	—	—	July 1970	16.1	26.52	.278	*65	.48	680	
32-54	Herington City Lake	Lyons Creek	Herington, Kans.	17.24	16.93	May 1922	—	2,180	.60	—	—	—	SCS
	do	do	do	—	—	May 1966	44	1,455	.45	*70	.96	1,463	
	UPPER REPUBLICAN, NORTH PLATTE, RIVER BASINS (FT. LARAMIE TO NORTH PLATTE) AND SOUTH PLATTE RIVER BASIN (SUBLETTE TO NORTH PLATTE)												
33-1	Wellfleet	Medicine Creek	Wellfleet, Nebr.	1/15.00	14.09	Oct. 1931	—	519	—	—	—	—	SCS
	do	do	do	—	—	May 1937	5.6	464	—	*65	.66	934	
33-2	Lockhart Farm Pond	Trib. of N. Platte River	Gering, Nebr.	2/2.564	2.558	Aug. 1939	—	15.64	.229	—	—	—	SCS
	do	do	do	—	—	July 1952	12.9	8.83	.129	57.3	.206	297	
33-3a	Harry Strunk Lake (Medicine Creek Dam)	Medicine Creek	Cambridge, Nebr.	656	653	Aug. 1949	—	92,817	1.691	—	—	—	BR
	do	do	do	—	—	Oct. 1951	2.16	90,920	1.656	71.6	1.34	2,086	
	do	do	do	—	—	Dec. 1962	11.17	88,663	1.615	70.3	.31	473	
33-4a	Flanagin Reservoir	Trib. of Republican River	Bartley, Nebr.	.900	.497	— 1940	—	9.71	—	—	—	—	SCS
	do	do	do	—	—	— 1956	16	4.89	—	*70	.602	918	
33-5a	Gallatin Reservoir	Trib. of Beaver Creek	Danbury, Nebr.	3.44	3.09	Apr. 1946	—	419.5	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1956	10.4	381.6	—	*70	1.18	1,800	
33-6	Klein Reservoir	Trib. of Republican River	McCook, Nebr.	1.99	1.97	— 1936	—	106.2	—	—	—	—	SCS
	do	do	do	—	—	-- 1956	20	56.0	—	*70	1.58	2,409	
33-7	Dempsey Pond	Trib. of East Curtis Creek	Moorefield, Nebr.	*.516	.51	June 1949	—	11.00	—	—	—	—	ARS
	do	do	do	—	—	July 1953	4	10.10	—	—	.447	—	
	do	do	do	—	—	June 1958	4.9	9.12	—	75.6	.392	665	
33-8a	Reichelt Stock Pond	Unnamed	Julesburg, Colo.	.72	.71	Oct. 1950	—	22.12	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1957	7	20.49	—	80.4	.28	490	
33-9	Bochain Pond	Trib. Beaver Creek	Atwood, Kans.	1.41	1.4	Nov. 1948	—	18.19	.960	—	—	—	SCS
	do	do	do	—	—	Aug. 1970	21.8	9.74	.541	*70	.28	428	
33-10	Frickey Pond	Trib. Sappa Creek	Norcatur, Kans.	3.32	3.28	Dec. 1958	—	72.48	.683	—	—	—	SCS
	do	do	do	—	—	July 1970	11.6	63.17	.596	*60	.24	320	
33-11	Walker Pond	Trib. Beaver Creek	Atwood, Kans.	4.78	4.77	Oct. 1948	—	20.96	.329	—	—	—	SCS
	do	do	do	—	—	Aug. 1970	21.8	13.82	.215	*70	.07	105	
33-12	Stroud Pond	Trib. Jones Canyon Creek	McDonald, Kans.	.83	.82	Nov. 1958	—	111.25	10.053	—	—	—	SCS
	do	do	do	—	—	July 1970	11.7	102.01	9.274	*70	.96	1,467	
33-13	Franktown-Parker W-1 W'shed	Willow Creek	Castle Rock, Colo.	7.6	7.57	June 1963	—	387	*1.92	—	—	—	SCS
	do	do	do	—	—	Jan. 1967	4	337.4	*1.67	—	1.6	—	
33-14	Bundegard Stock Pond	Sedgwick Draw	Lodgepole, Nebr.	1.5	1.5	— 1952	—	27.60	1.20	—	—	—	SCS
	do	do	do	—	—	Dec. 1967	15	23.88	1.04	*75	.17	277	
	NORTH PLATTE RIVER BASIN (ABOVE FT. LARAMIE) SOUTH PLATTER RIVER BASIN (ABOVE SUBLETTE)												
34-1	Castlewood	Cherry Creek	Denver, Colo.	167.2	166.9	— 1890	—	3,834	—	—	—	—	SCS
	do	do	do	—	—	2/Aug. 1933	43	3,126	—	77.5	.099	167	
34-2	[illegible]	do	do	387	386	Mar. 1936	—	9,808	—	—	—	—	SCS
	do	do	do	—	—	June 1938	2.25	9,710	—	75.6	.106	175	
	do	do	do	—	—	June 1939	1.00	9,424	—	—	.761	1,220	
34-3a	Guernsey Reservoir	North Platte River	Guernsey, Wy.	15,006	675	Feb. 1927	—	73,810	—	—	—	—	BR
	do	do	do	—	—	Jan. 1931	3.83	67,860	—	—	.28	—	
	do	do	do	—	—	Jan. 1933	2.00	65,050	—	—	.26	—	
	do	do	do	—	—	Jan. 1935	2.00	62,960	—	—	.20	—	
	do	do	do	—	—	Feb. 1937	2.10	60,930	—	—	.18	—	
	do	do	do	—	—	Feb. 1939	2.00	58,430	—	—	.33	—	
	do	do	do	—	—	Jan. 1941	2.00	56,600	—	—	.17	—	
	do	do	do	—	—	Jan. 1944	3.00	53,180	—	—	.21	—	
	do	do	do	—	—	July 1947	3.50	49,150	—	—	.21	263	
	do	do	do	—	—	June 1957	9.92	44,800	—	60.7	.109	107	
	do	do	do	—	—	Dec. 1966	9.40	4/45,228	.0467	56	—	—	
34-4a	Lake Cheesman	South Platte R. and Goose or Lost Park Cr.	Deckers, Colo.	1,766	1,440	Oct. 1900	—	79,064	.595	—	—	—	BR
	do	do	do	—	—	Sept. 1931	31	77,958	.586	*70	.025	37.2	

36-5	Pathfinder	North Platte River	Alcova, Wy.	10,700	3/3,315	June	1909	—	[illegible]	—	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	July	1930	41.1	[illegible]	—	[illegible]	[illegible]	[illegible]	
36-6	Seminoe	—♦—	Leo, Wy.	7,340	7,317	—	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Sept.	[illegible]	11.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
36-7	Englewood	Little Dry Creek	Littleton, Colo.	9.60	9.25	—	[illegible]	—	[illegible]	—	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Aug.	[illegible]	19.5	[illegible]	—	—	[illegible]	—	
36-8a	B-3 Kiowa Creek Watershed	Kiowa Creek	Elbert, Colo.	2.98	2.79	July	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Mar.	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
36-9	Round Butte	Coal Creek	Wellington, Colo.	11.7	11.6	—	[illegible]	—	[illegible]	—	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	June	[illegible]	[illegible]	[illegible]	—	[illegible]	[illegible]	[illegible]	
36-10a	C-11 Kiowa Creek Watershed	Kiowa Creek	Elbert, Colo.	.56	.56	June	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Jan.	[illegible]	9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
36-11	J-13 Kiowa Creek Watershed	—♦—	[illegible], Colo.	1.07	1.06	July	[illegible]	—	[illegible]	—	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	July	[illegible]	9	[illegible]	—	[illegible]	[illegible]	[illegible]	
36-12	B-9 Kiowa Creek Watershed	—♦—	Elbert, Colo.	.65	.64	Dec.	[illegible]	—	[illegible]	—	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	July	[illegible]	9.5	[illegible]	—	[illegible]	[illegible]	[illegible]	
36-13	[illegible]	[illegible]	Wellington, Colo.	3.15	3.08	July	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Feb.	[illegible]	30	[illegible]	[illegible]	—	[illegible]	—	
			MISSOURI RIVER BASIN (ABOVE BLAIR TO NEBRASKA CITY) PLATTE RIVER BASIN (BELOW NORTH PLATTE)											
35-1	[illegible]	Trib. of Soldier River	[illegible], Iowa	.199	.197	Sept.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Apr.	[illegible]	4.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-2	Fred Brown	Trib. of Willow River	Logan, Iowa	.100	.097	June	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	May	[illegible]	7.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-3	William [illegible]	Trib. of Elkhorn Creek	[illegible], Iowa	.208	.206	May	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	May	[illegible]	9.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-4	G. & A. Evans Lower Reservoir	Trib. of Boyer River	Denison, Iowa	.167	.139	Dec.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Apr.	[illegible]	10.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-5	G. & A. Evans Upper Reservoir	—♦—	—♦—	.065	.064	Mar.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Apr.	[illegible]	10.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-6	Charles [illegible]	—♦—	Dunlap, Iowa	.420	.425	May	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Apr.	[illegible]	3.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-7a	C. T. [illegible]	Trib. of E. Nishnabotna R.	[illegible], Iowa	.082	.079	Dec.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	May	[illegible]	8.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	June	[illegible]	3.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-8	Otto [illegible]	Trib. of Middle Soldier R.	Charter Oak, Iowa	.089	.086	May	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Mar.	[illegible]	6.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-9	Thomas [illegible]	Trib. of Boyer River	Dow City, Iowa	.130	.127	Aug.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	May	[illegible]	10/2.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-10	Fred [illegible]	Trib. of Willow Creek	Ute, Iowa	.217	.213	Aug.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Mar.	[illegible]	4.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-11b	Jones Creek	Jones Creek	Pisgah, Iowa	2.26	2.23	Feb.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Jan.	[illegible]	6.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	Sept.	[illegible]	1.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	Jan.	[illegible]	2.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-12a	Hans La Franz	Trib. of Boyer River	Denison, Iowa	.155	.152	May	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Apr.	[illegible]	6.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	July	[illegible]	4.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-13	Jensen-O'Dell Farm Pond	Trib. of L. Nemaha River	Syracuse, Nebr.	.199	.195	Nov.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Mar.	[illegible]	12.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-14	Peterson Farm Pond	—♦—	—♦—	.075	.074	Oct.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	July	[illegible]	11.75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-15b	Alfred Lage	Trib. of Elk Creek	Aspinwall, Iowa	.164	.160	June	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Apr.	[illegible]	7.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	June	[illegible]	3.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-16a	[illegible] Lage	—♦—	—♦—	.050	.036	July	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Apr.	[illegible]	7.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	June	[illegible]	3.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-17a	Edward [illegible]	Trib. of Boyer River	Denison, Iowa	.103	.090	July	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Apr.	[illegible]	4.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	July	[illegible]	4.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-18a	Walter Meyer	—♦—	—♦—	.097	.095	Nov.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Apr.	[illegible]	4.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	June	[illegible]	3.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-19a	Ben Miller No. 1	Trib. of W. Nishnabotna R.	[illegible], Iowa	.223	.216	Nov.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	May	[illegible]	7.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	June	[illegible]	3.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-20b	Ben Miller No. 3	—♦—	—♦—	.253	.250	Nov.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	May	[illegible]	7.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	June	[illegible]	3.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-21a	Harvey [illegible]	Trib. of Boyer River	Denison, Iowa	.336	.330	Oct.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Apr.	[illegible]	4.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	June	[illegible]	3.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-22a	Tracy [illegible]	—♦—	Vail, Iowa	.245	.230	Nov.	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Mar.	[illegible]	9.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	—♦—	—♦—	—♦—	—	—	July	[illegible]	4.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
35-23	Lake Ericson	Cedar River	Ericson, Nebr.	12/310	41	May	[illegible]	—	[illegible]	—	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Apr.	[illegible]	30.9	[illegible]	—	[illegible]	[illegible]	[illegible]	
35-24a	Roe Farm Pond	Trib. of Turkey Creek	[illegible], Nebr.	.18	.18	July	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
	—♦—	—♦—	—♦—	—	—	Aug.	[illegible]	5	[illegible]	[illegible]	[illegible]	.39	[illegible]	

1/ Excludes 30 sq. mi. of noncontributing drainage.
2/ Drainage area includes partial sediment trap for 0.133 sq. mi. and is estimated to retain 0.[illegible] ac.-ft. of sediment per year.
3/ Dam failed in 1955; survey made in 1956.
4/ Gain in capacity due to sediments cleaned from dam.
5/ Excludes 7,340 sq. mi. above Seminoe Dam, which was closed in April 1939.
6/ For period April 1939 - July 1950.
7/ For period June 1909 - July 1930.
8/ Below elevation 6,300 which is 17 ft. below spillway crest.
9/ Water supply pool capacity. Reservoir has greater capacity at spillway crest elevation.
10/ Reservoir filled full June 1944.
11/ Includes 0.13 ac.-ft. of sediment above emergency spillway.
12/ Area assumed to contribute surface runoff is 41 mi.²

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SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
				MISSOURI RIVER BASIN (ABOVE BLAIR TO NEBRASKA CITY) PLATTE RIVER BASIN (BELOW NORTH PLATTE) (Continued)									
35-25	Moss Farm Pond	Trib. of Dead Horse Creek	Loup City, Nebr.	1.80	1.79	Aug. 1948	—	15.6	*.163	—	—	—	SCS
	-do-	-do-	-do-	—	—	Aug. 1953	5	13.9	*.145	*65	.20	283	
35-26	Muller Farm Pond	Trib. of Oak Creek	Farwell, Nebr.	.358	.354	Aug. 1949	—	15.40	*.811	—	—	—	SCS
	-do-	-do-	-do-	—	—	Aug. 1953	4	14.39	*.757	*65	.71	1,005	
35-27	Ranicke Farm Pond	-do-	-do-	.27	.26	Aug. 1949	—	30.74	*2.135	—	—	—	SCS
	-do-	-do-	-do-	—	—	Aug. 1953	4	28.03	*1.947	*65	2.62	3,709	
35-28	Brehmer Reservoir	Trib. of L. Nemaha River	Dunbar, Nebr.	.184	.180	— 1952	—	11.78	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	5	9.93	—	*65	2.01	2,846	
35-29	Cook Reservoir	Trib. of Papillion Creek	Arlington, Nebr.	.391	.383	— 1934	—	29.4	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	23	21.1	—	*65	.921	1,304	
35-30a	Ingerson Reservoir No. 1	Turkey Creek	Louisville, Nebr.	.211	.209	— 1952	—	12.17	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	5	10.19	—	*65	1.89	2,676	
35-31	Ingerson Reservoir No. 2	-do-	-do-	.074	.073	— 1952	—	.72	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	5	.19	—	*65	1.43	2,024	
35-32	Ingerson Reservoir No. 3	-do-	-do-	.335	.331	— 1954	—	18.73	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	3	17.01	—	*65	1.71	2,421	
35-33	Kruse Reservoir	Papillion Creek	Elkhorn, Nebr.	.86	.779	— 1936	—	61.5	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	21	11.2	—	*65	2.99	4,233	
35-34	Lage Reservoir	Unnamed	Douglas, Nebr.	.263	.257	— 1946	—	12.8	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	11	4.33	—	*65	2.93	4,148	
35-35	Wickner Reservoir	Trib. of L. Nemaha River	Dunbar, Nebr.	.163	.158	— 1949	—	14.48	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	8	10.92	—	*65	2.72	3,851	
35-36	O'Brien Reservoir	South Cedar Creek	Manley, Nebr.	.417	.412	— 1937	—	22.09	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	20	7.28	—	*65	1.77	2,506	
35-37a	O'Neill Reservoir	Trib. of L. Nemaha River	Syracuse, Nebr.	.140	.130	— 1936	—	35.69	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	21	23.98	—	*65	4.29	6,073	
35-38	Pickrell Reservoir No. 1	Russell Creek	Unadilla, Nebr.	.336	.326	— 1949	—	35.76	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	8	32.35	—	*65	1.27	1,798	
35-39	Pickrell Reservoir No. 2	-do-	-do-	.102	.100	— 1954	—	3.18	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	3	2.96	—	*65	.725	1,026	
35-40	Pickrell Reservoir No. 3	-do-	-do-	.088	.086	— 1939	—	5.08	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	18	1.60	—	*65	2.31	3,270	
35-41	Pickrell Reservoir No. 4	-do-	-do-	.114	.113	— 1934	—	2.30	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	23	1.60	—	*65	.272	385	
35-42	Pollard Reservoir	Weeping Water Creek	Nehawka, Nebr.	.100	.098	— 1936	—	7.63	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	21	4.34	—	*65	1.55	2,194	
35-43	Ross Farm Reservoir	N. Fork Little Fox River	Otoe, Nebr.	.077	.074	— 1948	—	8.12	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	9	6.71	—	*65	2.06	2,916	
35-44	Reeder Reservoir	Long Creek	Fort Calhoun, Nebr.	.30	.298	— 1949	—	12.7	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	— 1957	8	4.12	—	*65	3.57	5,054	
35-45b	Wale Creek "A"	Trib. of Nishnabotna River	Malvern, Iowa	.188	.177	July 1954	—	43.9	*1.109	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct. 1956	2.33	42.0	*1.062	73.4	4.63	7,460	
	-do-	-do-	-do-	—	—	Sept. 1957	.92	40.2	*1.015	73.4	11.40	18,200	
	-do-	-do-	-do-	—	—	Oct. 1958	1.08	39.6	*1.000	72.3	3.11	4,900	
	-do-	-do-	-do-	—	—	Jan. 1960	1.33	38.9	*.982	58.7	2.99	3,800	
	-do-	-do-	-do-	—	—	Dec. 1960	.92	36.5	*.922	60.3	14.90	19,000	
	-do-	-do-	-do-	—	—	Feb. 1962	1/1.00	36.0	*.909	2/60.3	2.99	3,940	
	-do-	-do-	-do-	—	—	Jan. 1963	.92	34.7	*.876	69.5	7.85	11,880	
	-do-	-do-	-do-	—	—	Jan. 1964	1.00	3/35.54	*.897	2/60.3	4/-4.66	—	
	-do-	-do-	-do-	—	—	Jan. 1965	1.00	34.45	*.870	2/60.3	6.20	8,160	
	-do-	-do-	-do-	—	—	Jan. 1966	1.00	31.97	*.807	2/60.3	13.99	18,370	
	-do-	-do-	-do-	—	—	Jan. 1967	1.00	32.81	.828	2/60.3	4/-4.22	—	
	-do-	-do-	-do-	—	—	Jan. 1968	1.00	30.88	.780	2/60.3	10.91	14,328	
	-do-	-do-	-do-	—	—	Mar. 1969	1.17	31.37	.792	5/75.5	4/-2.372	—	
35-46b	Wale Creek "B"	-do-	-do-	.383	.368	Aug. 1954	—	55.3	*.666	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct. 1956	2.17	52.6	*.651	72.6	3.31	5,200	
	-do-	-do-	-do-	—	—	Sept. 1957	.92	51.8	*.641	69.5	2.55	3,900	
	-do-	-do-	-do-	—	—	Oct. 1958	1.08	50.3	*.623	59.2	3.64	4,700	
	-do-	-do-	-do-	—	—	Jan. 1960	1.33	47.6	*.589	67.2	5.52	8,100	
	-do-	-do-	-do-	—	—	Dec. 1960	.92	47.1	*.583	55.3	1.55	1,900	
	-do-	-do-	-do-	—	—	Feb. 1962	1/1.08	45.1	*.558	2/55.3	5.11	6,190	
	-do-	-do-	-do-	—	—	Jan. 1963	.92	43.5	*.538	62.1	4.73	6,400	
	-do-	-do-	-do-	—	—	Jan. 1964	1.00	44.6	*.552	51.8	4/-2.88	—	
	-do-	-do-	-do-	—	—	Jan. 1965	1.00	42.7	*.528	51.8	4.92	5,590	
	-do-	-do-	-do-	—	—	Jan. 1966	1.00	36.5	*.452	51.8	16.91	19,080	
	-do-	-do-	-do-	—	—	Aug. 1966	.58	39.89	.494	51.8	4/-15.706	—	
	-do-	-do-	-do-	—	—	June 1969	2.75	40.069	.50	5/71.64	4/-.298	—	
35-47b	Wale Creek "C"	-do-	-do-	6/.916	.323	July 1954	—	76.2	—	—	—	—	SCS
	-do-	-do-	-do-	—	—	Oct. 1956	2.33	73.8	—	53.9	3.28	3,900	
	-do-	-do-	-do-	—	—	Sept. 1957	.92	69.1	—	66.1	15.50	22,300	

	do	do	do	—	—	Oct.	1958	1.08	67.8	—	59.8	3.90	5,100	
	do	do	do	—	—	Jan.	1960	1.33	66.9	—	61.9	1.98	2,700	
	do	do	do	—	—	Dec.	1960	.92	64.9	—	55.2	6.69	8,000	
	do	do	do	—	—	Feb.	1962	1/1.00	64.1	—	2/55.2	2.60	3,120	
	do	do	do	—	—	Jan.	1963	.92	61.6	—	58.0	8.42	10,440	
	do	do	do	—	—	Jan.	1964	1.00	63.59	—	57.8	4/-6.19	—	
	do	do	do	—	—	Jan.	1965	1.00	59.88	—	65.44	11.49	1,068	
	do	do	do	—	—	Mar.	1969	4.17	57.58	—	5/65.44	1.71	112	
35-48b	Male Creek "F"	Trib. of Male Creek	do	.063	.060	Oct.	1955	—	19.4	*1.470	—	—	—	SCS
	do	do	do	—	—	Nov.	1956	1.08	18.6	*1.409	77.2	13.30	22,400	
	do	do	do	—	—	Sept.	1957	.83	17.7	*1.361	57.8	17.90	22,300	
	do	do	do	—	—	Sept.	1958	1.00	17.6	*1.333	72.8	1.90	2,400	
	do	do	do	—	—	Jan.	1960	1.33	17.1	*1.295	44.5	5.83	5,600	
	do	do	do	—	—	Dec.	1960	.92	16.3	*1.235	56.5	15.30	18,900	
	do	do	do	—	—	Feb.	1962	1.17	16.1	*1.220	2/56.5	2.67	3,300	
	do	do	do	—	—	Jan.	1963	.92	15.4	*1.167	60.3	12.17	16,000	
	do	do	do	—	—	Jan.	1964	1.00	—	—	56.0	0	0	
	do	do	do	—	—	Jan.	1965	1.00	14.7	*1.114	54.3	11.43	13,500	
	do	do	do	—	—	Jan.	1966	1.00	13.7	*1.038	54.3	17.32	20,500	
	do	do	do	—	—	Jan.	1967	1.0	14.361	1.088	54.3	4/-7.767	—	
	do	do	do	—	—	Jan.	1968	1.0	13.793	1.045	54.3	9.467	11,196	
	do	do	do	—	—	Feb.	1969	1.08	13.751	1.042	5/69.5	.65	30,756	
35-49b	Male Creek "E"	do	do	.819	.796	Oct.	1955	—	103	*.595	—	—	—	SCS
	do	do	do	—	—	Oct.	1956	1.00	100	*.578	66.4	4.17	6,000	
	do	do	do	—	—	Sept.	1957	.92	97.4	*.563	64.4	3.98	5,600	
	do	do	do	—	—	Sept.	1958	1.00	97.2	*.562	66.8	.40	600	
	do	do	do	—	—	Jan.	1960	1.33	94.6	*.547	55.6	2.39	2,900	
	do	do	do	—	—	Dec.	1960	.92	93.2	*.539	55.7	1.93	2,300	
	do	do	do	—	—	Feb.	1962	1.17	90.8	*.525	2/55.7	2.61	3,200	
	do	do	do	—	—	Jan.	1963	.92	88.7	*.513	59.4	4.21	5,400	
	do	do	do	—	—	Jan.	1964	1.00	—	—	51.1	4/-2.02	—	
	do	do	do	—	—	Jan.	1965	1.00	86.0	*.497	49.9	5.46	5,900	
	do	do	do	—	—	Jan.	1966	1.00	80.5	*.465	49.9	6.86	7,900	
	do	do	do	—	—	Feb.	1969	1.08	73.867	.423	5/66.29	1.055	13,419	
35-50	Miles Wallace Pond	Platte	Cozad, Nebr.	.81	.81	—	1939	—	7/1.61	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1964	25	.72	—	104	.05	113	
35-51	Gayle Miller Pond	do	do	.94	.94	—	1948	—	16.18	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1964	16	13.06	—	70	.21	320	
35-52	Kenneth Smith Pond	do	do	.49	.49	—	1940	—	5.97	—	—	—	—	SCS
	do	do	do	—	—	Oct.	1964	24	4.99	—	95	.08	166	
35-53	Wayne Bartleff Pond	do	do	1.13	1.13	—	1940	—	15.7	—	—	—	—	SCS
	do	do	do	—	—	Oct.	1964	24	12.7	—	95	.11	228	
35-54	Oak-Middle Creek Watershed Site 6Y-4	North Platte	Dwight, Nebr.	.89	.89	Jan.	1958	—	175.7	—	—	—	—	SCS
	do	do	do	—	—	Dec.	1964	7	140.8	—	66	5.61	8,064	
			RIVER BASIN (NIOBRARA TO ABOVE BLAIR) JAMES AND BIG SIOUX RIVER BASINS											
36-1	Split Rock	Trib. of Big Sioux River	Ihlen, Minn.	41.3	41.1	July	1938	—	899.0	*.314	—	—	—	SCS
	do	do	do	—	—	June	1949	10.9	492.1	*.242	62.8	.462	431	
36-2a	C. A. Stiles	Unnamed	Washta, Iowa	.593	.572	Dec.	1940	—	78.0	*.394	—	—	—	SCS
	do	do	do	—	—	Mar.	1949	8.3	70.7	*.347	46.9	1.54	1,980	
	do	do	do	—	—	Sept.	1950	1.5	69.1	*.335	*57.8	1.82	2,300	
	do	do	do	—	—	Feb.	1953	2.4	67.7	*.326	57.8	.98	1,260	
36-3	Farmers' Ditch Old Desilting Basin	Farmers' Ditch	Bronson, Iowa	22.9	21.4	Apr.	1941	—	8/674	*.178	—	—	—	SCS
	do	do	do	—	—	Feb.	1965	3.8	275	*.073	68.3	4.91	7,300	
36-4	Struck Farm Pond	Trib. of Clay Creek	Mayfield, S. Dak.	.408	.407	July	1947	—	4.09	*.157	—	—	—	SCS
	do	do	do	—	—	July	1953	6	3.37	*.129	*65	.30	411	
36-5	Brodersen Farm Pond	do	Volin, S. Dak.	2.46	2.45	July	1951	—	25.19	*.160	—	—	—	SCS
	do	do	do	—	—	July	1953	2	20.10	*.128	*55	1.04	1,266	
36-6	Masters Upper Reservoir	Unnamed	Mapleton, Iowa	.178	.169	Dec.	1949	—	37.95	*.949	—	—	—	SCS
	do	do	do	—	—	Sept.	1950	.79	9/38.20	*.955	—	—	—	
	do	do	do	—	—	Aug.	1951	.87	35.25	*.881	*77.7	20.1	34,615	
	do	do	do	—	—	Apr.	1952	.73	34.80	*.870	*77.7	3.67	6,211	
	do	do	do	—	—	Nov.	1952	.60	34.80	*.870	77.7	—	—	
36-7	Hopper Main	do	do	.196	.186	Mar.	1949	—	38.1	*.866	—	—	—	SCS
	do	do	do	—	—	July	1950	1.37	37.8	*.859	*76.1	1.25	2,090	
	do	do	do	—	—	July	1951	1.01	34.4	*.782	*76.1	17.96	29,768	
	do	do	do	—	—	Nov.	1952	1.31	34.4	*.782	76.1	—	—	
36-8	Hopper Sediment	do	do	.075	.069	Mar.	1949	—	8.45	*.497	—	—	—	SCS
	do	do	do	—	—	Aug.	1950	1.42	8.45	*.497	*72.7	0	0	
	do	do	do	—	—	Aug.	1951	.98	7.88	*.464	*72.7	8.41	13,319	
	do	do	do	—	—	Nov.	1952	1.30	7.88	*.464	72.7	0	0	

1/ Adjusted to correct previous years error.
2/ Based on December 1960 sample.
3/ Pond dry when surveyed.
4/ Minus (-) indicates scour or compaction. (treated as negative sediment).
5/ Weight determined by gamma probe.
6/ Includes upstream structures.
7/ Water supply pool capacity. Reservoir capacity is greater at spillway crest elevation.
8/ Conservation pool capacity. Flood pool capacity is 1,952 ac.-ft.
9/ Increase in capacity in 1950 was due to settlement of dam.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	RIVER BASIN (NIOBRARA TO ABOVE BLAIR) JAMES AND BIG SIOUX RIVER BASINS (Cont'nued)												
36-9	Theobald Main	Unnamed	Anthon, Iowa	.483	.442	June 1949	—	103.2	*1.053	—	—	—	SCS
	do	do	do	—	—	Aug. 1950	1.15	96.0	*.999	*72.3	18.1	28,502	
	do	do	do	—	—	May 1951	.77	93.5	*.954	*72.3	1.36	2,142	
	do	do	do	—	—	Oct. 1952	1.38	89.2	*.910	72.3	7.13	12,220	
36-10	Theobald Lateral C.	do	do	.250	.234	Nov. 1948	—	37.5	*.735	—	—	—	SCS
	do	do	do	—	—	July 1950	1.70	34.5	*.676	*67.9	7.65	11,313	
	do	do	do	—	—	May 1951	.83	34.3	*.673	*67.9	1.08	1,597	
	do	do	do	—	—	May 1952	.96	33.5	*.657	67.9	3.60	5,326	
36-11	Theobald Lateral D.	do	do	.098	.089	Nov. 1948	—	19.5	*.975	—	—	—	SCS
	do	do	do	—	—	July 1950	1.71	18.9	*.945	*73.1	3.63	5,780	
	do	do	do	—	—	May 1951	.82	18.7	*.935	*73.1	2.86	4,560	
	do	do	do	—	—	Oct. 1952	1.42	18.6	*.930	73.1	.72	1,146	
36-12a	Mortensen	do	Cherokee, Iowa	1.39	1.37	Oct. 1950	--	229.0	*.718	—	—	—	SCS
36-13	Bartlett	Green Creek	Alcester, S. Dak.	.234	.234	Nov. 1936	—	12.84	1.035	—	—	—	SCS
	do	do	do	—	—	Nov. 1955	19	6.86	.553	77.0	1.35	2,264	
36-14b	Lake Mitchell	Firesteel Creek	Mitchell, S. Dak.	584	496	Oct. 1928	—	10,963	.49	—	—	—	SCS
	do	do	do	—	—	July 1948	19.8	10,380	.47	*66.79	.057	58	
	do	do	do	—	—	Aug. 1958	10.0	9,798	.44	*66.79	.117	119	
	do	do	do	—	—	July 1969	11.0	9,235	.42	65.67	.103	231	
36-15	Salem Dam	Silver Creek	Sioux Falls, S. Dak.	1.158	1.158	Aug. 1950	—	12.79	.206	—	—	—	SCS
	do	do	do	—	—	Aug. 1955	5.0	8.16	.132	*60	.80	1,045.44	
36-16	Scott No. 2	Scott Creek	Alcester, S. Dak.	.152	.152	Oct. 1936	—	7.36	.909	—	—	—	SCS
	do	do	do	—	—	Apr. 1955	18.5	3.14	.388	56.6	1.52	1,807.2	
36-17	Lake Vermillion	Vermillion	Montrose, S. Dak.	402.9	402.0	Mar. 1959	—	5,173.7	.297	—	—	—	SCS
	do	do	do	—	—	June 1964	5.25	4,927.5	.283	35	.117	89	
36-18	Vermillion Watershed No. A	Trib. of Vermillion	Salem, S. Dak.	.075	.075	Aug. 1955	—	3.20	1.000	—	—	—	SCS
	do	do	do	—	—	Nov. 1965	10.3	2.67	.834	*50	.68	740	
36-19	Vermillion Watershed No. B	do	do	.237	.237	Oct. 1950	—	6.48	.639	—	—	—	SCS
	do	do	do	--	—	Nov. 1965	15	5.06	.491	*50	.40	435	
36-20	Lake Okabena	Trib. of Okabena Creek	Worthington, Minn.	17.60	16.27	— *1897	—	5,183	2.234	—	—	—	SCS
	do	do	do	—	—	Mar. 1963	65	1/5,100	2.198	26	.07	492	
36-21a	Scott Creek #11	Scott Creek	Alcester, S. Dak.	1.85	1.45	Oct. 1954	—	196.64	2.55	—	—	—	SCS
	do	do	do	—	—	Apr. 1965	10.5	192.7	2.50	*65	.26	368	
	do	do	do	—	—	May 1970	5.1	179.75	2.33	—	1.785	2,527	
36-22	Richmond Lake	Foot Creek	Aberdeen, S. Dak.	82	73.5	Jan. 1937	—	9,880.9	7.53	—	—	—	SCS
	do	do	do	—	—	Sept. 1969	32.75	8,971.08	6.84	52.8	.378	436	
	MISSOURI RIVER BASIN (ABOVE PIERRE TO NIOBRARA) Niobrara and White River Basins												
37-1a	Elkins Stock Pond No. 1	Br. of Fromsmann Creek	Hayes, S. Dak.	.58	.57	May 1907	—	18.61	—	—	—	—	SCS
	do	do	do	—	--	June 1937	30	15.78	—	41.3	.16	144	
37-2	Elkins Stock Pond No. 2	do	do	.33	.33	May 1911	—	4.34	—	—	—	—	SCS
	do	do	do	—	—	June 1937	26.0	3.18	—	36.6	.136	108	
37-3	Land Utilization Project No. 226-1.	Trib. of Bad River	Pierre, S. Dak.	.203	.197	Mar. 1936	—	16.7	—	—	—	—	SCS
	do	do	do	—	—	July 1945	9.3	15.2	—	—	.632	—	
37-4	Land Utilization Project No. 226-2.	Trib. of Missouri River	do	.995	.981	Mar. 1936	—	34.0	—	—	—	—	SCS
	do	do	do	—	—	July 1945	9.3	29.8	—	—	.459	—	
37-5	Land Utilization Project No. 226-4.	Trib. of Bad River	do	.748	.742	May 1936	—	13.6	—	—	—	—	SCS
	do	do	do	—	—	July 1945	9.2	9.9	—	—	.379	—	
37-6	Land Utilization Project No. 226-6.	Trib. of Missouri River	do	2.555	2.541	Apr. 1936	—	31.8	—	—	—	—	SCS
	do	do	do	—	—	July 1945	9.3	25.1	—	—	.385	—	
37-7	Land Utilization Project No. 226-13.	Trib. of Bad River	do	.166	.163	Oct. 1936	—	9.1	—	—	—	—	SCS
	do	do	do	—	--	July 1945	8.7	8.3	—	—	.521	—	
37-8	Land Utilization Project No. 226-21.	Trib. of Missouri River	do	.245	.234	Oct. 1936	—	28.9	—	—	—	—	SCS
	do	do	do	—	--	July 1945	8.7	26.1	—	—	1.389	—	
37-9	Land Utilization Project No. 226-22.	Trib. of Bad River	do	.514	.511	Nov. 1936	—	9.2	—	—	—	—	SCS
	do	do	do	—	—	July 1945	8.7	8.3	—	—	.320	—	

37-10	Land Utilization Project No. 226-25.	Trib. of Missouri River	do	.147	.144	Nov.	1937	—	9.3	—	—	—	—	SCS
	do	do	do	—	—	July	1965	7.7	8.4	—	—	.799	—	
37-11	Land Utilization Project No. 226-31.	do	do	.225	.220	Mar.	1937	—	13.9	—	—	—	—	SCS
	do	do	do	—	—	July	1965	8.3	12.3	—	—	.899	—	
37-12	Land Utilization Project No. 226-32.	do	do	.477	.472	Mar.	1937	—	14.1	—	—	—	—	SCS
	do	do	do	—	—	July	1965	8.3	12.1	—	—	.508	—	
37-13	Land Utilization Project No. 226-34.	do	do	1.222	1.209	June	1937	—	44.3	—	—	—	—	SCS
	do	do	do	—	—	July	1965	8.1	40.0	—	—	.443	—	
37-14	Land Utilization Project No. 226-35.	do	do	.508	.502	May	1938	—	18.4	—	—	—	—	SCS
	do	do	do	—	—	July	1965	7.2	16.1	—	—	.431	—	
37-15	Land Utilization Project No. 243-1.	do	do	.108	.106	Nov.	1937	—	2.7	—	—	—	—	SCS
	do	do	do	—	—	July	1965	7.7	2.0	—	—	.411	—	
37-16	Land Utilization Project No. 243-2.	Unnamed Stream (interior drainage)	do	.134	.131	Nov.	1937	—	5.2	—	—	—	—	SCS
	do	do	do	—	—	July	1965	7.7	3.0	—	—	2.206	—	
37-17	Land Utilization Project No. 243-5.	Trib. of Missouri River	do	.072	.070	Nov.	1937	—	2.6	—	—	—	—	SCS
	do	do	do	—	—	July	1965	7.7	2.2	—	—	.709	—	
37-18	Land Utilization Project No. 243-6.	Trib. of Bad River	do	.117	.116	Nov.	1937	—	3.2	—	—	—	—	SCS
	do	do	do	—	—	July	1965	7.7	2.8	—	—	.476	—	
37-19	Land Utilization Project No. 243-10.	Trib. of Missouri River	do	.533	.532	June	1938	—	3.7	—	—	—	—	SCS
	do	do	do	—	—	July	1965	7.1	2.9	—	—	.222	—	
37-20	Land Utilization Project No. 243-11.	do	do	.339	.338	July	1938	—	4.5	—	—	—	—	SCS
	do	do	do	—	—	July	1965	7.0	3.9	—	—	.266	—	
37-21	Harris Reservoir North	Unnamed	Gordon, Nebr.	.577	.573	May	1947	—	7.3	—	—	—	—	SCS
	do	do	do	—	—	Nov.	1956	9.5	5.57	—	*70	.315	680	
37-22	Harris Reservoir South	do	do	11.9	11.85	May	1947	—	18.64	—	—	—	—	SCS
	do	do	do	—	—	Nov.	1956	9.5	15.77	—	*70	.025	38	
37-23	Johnson Reservoir	do	do	.856	.849	—	1946	—	16.25	—	—	—	—	SCS
	do	do	do	—	—	Nov.	1956	10.3	12.39	—	*70	.435	663	
37-24a	Lake Dante	Trib. of Choteau Creek	Wagner, S. Dak.	2.89	2.89	Nov.	1937	—	260.73	.352	—	—	—	SCS
	do	do	do	—	—	Oct.	1955	17.9	230.95	.312	*60	.578	756	
37-25	Kapars	Trib. of Missouri River	do	10.3	10.3	July	1937	—	231.0	.860	—	—	—	SCS
	do	do	do	—	—	July	1965	28	200.32	.738	50	.107	115	

MISSOURI RIVER BASIN (MOBRIDGE TO ABOVE PIERRE)
Cheyenne and Belle Fourche River Basins

38-1	Johnson's Stock Pond	Trib. of L. Cheyenne River	Gettysburg, S. Dak.	.191	.188	—	1912	—	2.56	—	—	—	—	SCS
	do	do	do	—	—	June	1937	25.0	1.85	—	98.1	.16	202	
38-2	Bartel Stock Pond	Little Cheyenne Creek	do	.609	.606	—	1908	—	4.30	—	—	—	—	SCS
	do	do	do	—	—	June	1937	29.0	2.80	—	93.6	.04	93.4	
38-3a	W-14 (Anderson)	Trib. of Fourmile Creek	Vale, S. Dak.	.054	.054	Nov.	1956	—	5.60	1.42	—	—	—	ARS
	do	do	do	—	—	Oct.	1958	1.9	5.14	1.30	70	4.48	6,708	
	do	do	do	—	—	Dec.	1962	4.2	4.51	1.14	70	2.78	4,198	
	do	do	do	—	—	Apr.	1967	4.3	4.36	1.11	70	.65	987	
38-4a	W-9 (Sword)	Sulphur Creek	Sulphur, S. Dak.	1.27	1.27	Nov.	1951	—	390.7	10.35	—	—	—	ARS
	do	do	do	—	—	June	1961	9.6	334	9.05	84	1.38	2,525	
	do	do	do	—	—	June	1969	8.0	315.3	9.3	84	1.84	3,367	
38-5	Angostura Reservoir	Cheyenne River	Hot Springs, S. Dak.	9,100	9,093	Oct.	1949	—	159,919	.866	—	—	—	BR
	do	do	do	—	—	Sept.	1965	16	138,762	.752	56.6	.145	178	
38-6	Sturgis Watershed No. 1	Alkali Creek	Sturgis, S. Dak.	.339	.339	Oct.	1965	—	—	—	—	—	—	FS
	do	do	do	—	—	Oct.	1966	1.0	—	—	92.2	2/—	.019	
	do	do	do	—	—	Oct.	1967	1.0	—	—	92.2	2/—	.407	
	do	do	do	—	—	Oct.	1968	1.0	—	—	92.2	2/—	.044	
	do	do	do	—	—	Oct.	1969	1.0	—	—	92.2	2/—	.252	
	do	do	do	—	—	Oct.	1970	1.0	—	—	92.2	2/—	.495	
38-7	Sturgis Watershed No. 2	do	do	.139	.139	Oct.	1965	—	—	—	—	—	—	FS
	do	do	do	—	—	Oct.	1966	1.0	—	—	92.2	2/—	.05	
	do	do	do	—	—	Oct.	1967	1.0	—	—	92.2	.021	2,268	
	do	do	do	—	—	Oct.	1968	1.0	—	—	92.2	2/—	.06	
	do	do	do	—	—	Oct.	1969	1.0	—	—	92.2	2/—	.026	
	do	do	do	—	—	Oct.	1970	1.0	—	—	92.2	.004	8,705	
38-8	Sturgis Watershed No. 3	do	do	.297	.297	Oct.	1965	—	—	—	—	—	—	FS
	do	do	do	—	—	Oct.	1966	1.0	—	—	92.2	2/—	.106	
	do	do	do	—	—	Oct.	1967	1.0	—	—	92.2	2/—	.464	
	do	do	do	—	—	Oct.	1968	1.0	—	—	92.2	2/—	.036	
	do	do	do	—	—	Oct.	1969	1.0	—	—	92.2	2/—	.022	
	do	do	do	—	—	Oct.	1970	1.0	—	—	92.2	.021	2,430	
38-9	Canyon Lake	Rapid Creek	Rapid City, S. Dak.	385	3/66.35	Sept.	1933	—	300.77	.011	—	—	—	SCS
	do	do	do	—	—	Oct.	1970	37	221.75	.008	65	4/.032	4/50	

1/ 877 ac.-ft. of storage created by dredging.
2/ Less than .001. Material removed from Weir Pond facility periodically.
3/ Pactola Reservoir controls about 320 sq. mi.
4/ 9.9 ac.-ft. sediment, removed in 1956, not included.
* Estimated or assumed.

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SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	MISSOURI RIVER BASIN (MOBRIDGE TO ABOVE PIERRE) Cheyenne and Belle Fourche River Basins (Continued)												
38-10	Barrel Detention Dam	Unnamed	New Castle, Wy.	6.15	4.83	Aug. 1968	—	454.6	*6.7	—	—	—	SCS
	do	do	do	—	—	Dec. 1970	2.25	438.4	*6.7	86	1.49	2,799	
38-11	New Underwood Reservoir	do	New Underwood, S. Dak.	2.97	2.94	— 1935	—	138.5	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1970	35	120.2	—	*60	.177	231	
	MISSOURI RIVER BASIN (WILLISTON TO MOBRIDGE) Moreau, Grand, Cannonball, Heart, and Little Missouri River Basins												
39-1	Frederick Stock Dam	Louse Creek	Flasher, N. Dak.	1.17	1.17	— 1935	—	1.06	*.021	—	—	—	SCS
	do	do	do	—	—	Aug. 1956	21	.864	*.017	*35	.00797	6.07	
39-2a	Hiddenwood Lake	Hiddenwood Creek	Selby, S. Dak.	31.8	27.2	May 1926	—	1/207.78	.549	—	—	—	SCS
	do	do	do	—	—	Sept. 1959	33.3	165.70	.438	55	.047	56	
39-3	Kaubisch Reservoir	Trib. of Moreau	Sorum, S. Dak.	2.20	1.97	Aug. 1924	—	389.80	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1964	40	380.75	—	*60	.12	156.8	
39-4	Clark Reservoir	do	do	3.96	2.56	Aug. 1949	—	62.00	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1964	15	56.15	—	*60	.15	196	
39-5	Wagner Reservoir	Trib. of Grand	Lemmon, S. Dak.	.493	.493	Aug. 1951	—	35.96	3.182	—	—	—	SCS
	do	do	do	—	—	Aug. 1964	13	33.96	3.005	*60	.30	392	
39-6	Gale Reservoir	do	Bison, S. Dak.	4.66	2.21	Aug. 1937	—	161.1	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1964	27	144.01	—	*60	.29	379	
39-7	Van Oosting Dam	Trib. of Missouri River	Hensler, N. Dak.	1.78	1.76	Apr. 1950	—	171.5	*3.618	—	—	—	SCS
	do	do	do	—	—	Oct. 1964	14.5	167.0	*3.523	60.4	2/.176	2/231.5	
39-8	Battle Creek Detention Dam	Battle Creek	Hulett, Wy.	18.44	18.44	Nov. 1967	—	620.1	*.63	—	—	—	SCS
	do	do	do	—	—	Sept. 1970	2.83	614.7	*.62	71.4	.106	161.8	
	MISSOURI RIVER BASIN (ZORTMAN TO WILLISTON) Milk and Musselshell River Basins												
40-1	Yellow Water	Yellow Water Creek	Winnett, Mont.	55	54	June 1938	—	4,796	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1968	10.3	4,616	—	*32	.12	224	
40-2	Fort Peck	Missouri River	Fort Peck, Mont.	57,725	3/—	Oct. 1937	—	19,557,492	—	—	—	—	CE
	do	do	do	—	—	June 1950	12.67	19,233,686	—	56.7	.65	803	
	do	do	do	—	—	Sept. 1952	2.25	19,186,698	—	57.4	.53	724	
	do	do	do	—	—	June 1954	1.75	19,164,369	—	57.9	.33	471	
	do	do	do	—	—	May 1958	3.92	19,162,460	—	58.8	.013	75	
	do	do	do	—	—	June 1961	3.08	19,138,511	—	59.4	.22	338	
	MISSOURI RIVER BASIN (ABOVE ZORTMAN)												
41-1	Anderson Reservoir	Trib. of Pondera Creek	Conrad, Mont.	.156	.156	— 1916	—	9.27	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1955	39	8.44	—	*60	.136	183	
41-2a	Krupp	do	do	.625	.625	— 1900	—	4.70	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1955	55	3.84	—	*60	.025	33	
41-3	Walston	do	do	2.96	2.96	— 1915	—	66.13	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1955	40	51.71	—	*60	.122	166	
	LOWER YELLOWSTONE RIVER BASIN Tongue and Powder River Basins												
42-1a	Baker Lake	Sandstone Creek	Baker, Mont.	5.20	5.01	May 1908	—	756	3.40	—	—	—	SCS
	do	do	do	—	—	May 1937	29.1	502	2.26	39	1.76	1,478	
	do	do	do	—	—	May 1955	18.0	393	1.77	45	1.21	1,553	
	do	do	do	—	—	July 1970	15.2	235	1.06	40	2.08	1,288	
42-2	Tongue River	Tongue River	Decker, Mont.	1,760	1,734.5	May 1939	—	72,510	.268	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1948	9.42	69,439	.237	70.5	.188	289.7	
42-3	Herweg Reservoir	Dry Creek	Miles City, Mont.	6.92	6.92	— 1941	—	300	4.05	—	—	—	SCS
	do	do	do	—	—	— 1969	28	222	3.0	70	.603	614	

UPPER YELLOWSTONE RIVER BASIN

43-1b	Buffalo Bill	Shoshone River	Cody, Wy.	1,470	1,470	May	1910	—	455,830	.492	—	—	—	BR
	do	do	do	—	—	—	1941	31.7	439,851	.476	—	.34	—	
	do	do	do	—	—	—	1958	17.0	421,333	.455	—	.62	—	
43-2	Big Gin	Trib. of Fifteenmile Creek	Worland, Wy.	.942	.918	Oct.	1954	—	99.2	3.906	—	—	—	GS
	do	do	do	—	—	Oct.	1955	1	98.1	3.862	—	1.2	—	
	do	do	do	—	—	Oct.	1958	3	96.0	3.780	—	.8	—	
	do	do	do	—	—	Oct.	1961	3	93.2	3.669	—	1.0	—	
43-3	Fraser Draw	Fraser Draw	Manata, Wy.	27.4	27.4	Oct.	1954	—	90.2	1.797	—	—	—	GS
	do	do	do	—	—	Oct.	1958	4	87.7	1.767	—	.02	—	
	do	do	do	—	—	Nov.	1960	2	83.3	1.699	—	.08	—	
43-4	East Fork	Graham Draw	do	.81	.81	June	1949	—	12.30	4.261	—	—	—	GS
	do	do	do	—	—	Nov.	1949	.42	11.73	4.065	—	1.68	—	
	do	do	do	—	—	May	1952	2.56	11.08	3.797	—	.35	—	
	do	do	do	—	—	Oct.	1955	3.42	10.83	3.734	—	.06	—	
	do	do	do	—	—	Oct.	1957	2.00	10.61	3.699	—	.14	—	
	do	do	do	—	—	Oct.	1960	3.00	10.58	3.668	—	.02	—	
43-5	West Fork	do	do	.38	.38	July	1948	—	3.13	3.627	—	—	—	GS
	do	do	do	—	—	Nov.	1949	1.25	2.96	3.385	—	.39	—	
	do	do	do	—	—	May	1952	2.54	2.84	3.098	—	.42	—	
	do	do	do	—	—	Oct.	1955	3.42	2.62	3.195	—	0	—	
	do	do	do	—	—	Oct.	1957	2.00	2.59	3.159	—	.05	—	
	do	do	do	—	—	Oct.	1960	3.00	2.47	3.012	—	.11	—	
43-6	Red Spires	Rock Waterhole Creek	Worland, Wy.	5.24	5.20	Oct.	1954	—	193.6	1.098	—	—	—	GS
	do	do	do	—	—	Oct.	1955	1	191.3	1.086	—	.40	—	
	do	do	do	—	—	Oct.	1958	3	176.1	1.000	—	.98	—	
	do	do	do	—	—	Oct.	1961	3	154.5	.877	—	1.38	—	
43-7	Boysen	Wind River	Thermopolis, Wy.	7,700	7,670	Oct.	1951	—	819,132	.625	—	—	—	BR
	do	do	do	—	—	Aug.	1964	12.8	802,004	.612	83	.17	307	

ARKANSAS RIVER BASIN (VAN BUREN TO LITTLE ROCK) WHITE RIVER BASIN

44-1a	Lake Bennett	East Fork Creek	Conway, Ark.	4.16	4.11	June	1935	—	475	—	—	—	—	SCS
	do	do	do	—	—	Nov.	1935	0.4	490	—	—	2.43	—	
	do	do	do	—	—	Nov.	1946	11.0	481	.130	—	.20	—	
44-2	Lake Booneville	Trib. of Petit Jean Creek	Booneville, Ark.	2.60	2.57	Mar.	1929	—	289	.127	—	—	—	SCS
	do	do	do	—	—	Nov.	1935	6.75	282	—	—	.455	—	
44-3	Lake Fort Smith	Jack and Jones Creeks	Mountainburg, Ark.	65	64	Feb.	1936	—	*13,810	—	—	—	—	SCS
	do	do	do	—	—	Apr.	1940	4.2	13,727	—	—	.31	—	
44-4	Lake Bailey	Cedar Creek	Morrilton, Ark.	15.2	15	Sept.	1937	—	629	—	—	—	—	SCS
	do	do	do	—	—	May	1940	2.7	602	—	—	.66	—	
44-5	Lake Taneycomo	White River	Branson, Mo.	4,610	4,606	Mar.	1913	—	43,980	—	—	—	—	SCS
	do	do	do	—	—	Aug.	1935	22.4	23,714	—	—	.196	—	
44-6	Nimrod	Fourche La Fave River	Nimrod, Ark.	680	652	May	1942	—	336,000	.532	—	—	—	CE
	do	do	do	—	—	Apr.	1950	7.9	4/336,000	.532	—	4/—	—	
44-7	Norfolk	North Fork River	Norfork, Ark.	1,806	1,772	June	1943	—	1,960,900	1.138	—	—	—	CE
	do	do	do	—	—	May	1950	6.9	5/1,960,500	1.138	—	5/—	—	
44-8	Cove Lake	Arkansas River Trib.	Paris, Ark.	10.90	10.66	May	1938	—	2,206	*.298	—	—	—	SCS
	do	do	do	—	—	Dec.	1953	15.5	2,161	*.290	—	.39	—	
44-9	Charleston Lake	do	Charleston, Ark.	1.03	.93	Apr.	1937	—	325	*.455	—	—	—	SCS
	do	do	do	—	—	Dec.	1953	16.66	264	*.370	—	3.96	—	
44-10	Six Mile Creek No. 2	Shaver Creek	Caulksville, Ark.	5.38	5.26	Oct.	1954	—	6/1,613.93	.469	—	—	—	SCS
	do	do	do	—	—	July	1961	6.67	6/1,608.15	.467	—	6/.17	—	
	do	do	do	—	—	Oct.	1954	—	7/309.52	.090	—	—	—	
	do	do	do	—	—	July	1961	6.67	7/301.01	.087	—	7/.24	—	
44-11	Six Mile Creek No. 5	Little Cane Creek	do	1.90	1.81	Dec.	1954	—	6/860.98	.708	—	—	—	SCS
	do	do	do	—	—	July	1961	6.63	6/854.63	.703	—	6/.53	—	
	do	do	do	—	—	Dec.	1954	—	7/221.96	.183	—	—	—	
	do	do	do	—	—	July	1961	6.63	7/215.77	.177	—	7/.51	—	
44-12	Six Mile Creek No. 23	Trib. of Hurricane Creek	Peter Pender, Ark.	4.16	3.91	July	1955	—	6/989.25	.372	—	—	—	SCS
	do	do	do	—	—	July	1961	6.00	6/983.27	.369	—	6/.26	—	
	do	do	do	—	—	July	1955	—	7/75.92	.029	—	—	—	
	do	do	do	—	—	July	1961	6.00	7/70.64	.027	—	7/.23	—	

1/ Conservation pool capacity. Reservoir has greater capacity at spillway crest elevation.
2/ Includes 0.03 ac.-ft. above crest deposits.
3/ 1937-1959=39,097 sq. mi.; 1956-1961=34,692 sq. mi.
4/ Suspended - load inflow was 608 ac.-ft.; suspended - load outflow was 200 ac.-ft. during period. Deposits too small to measure by range survey.
5/ Sediment inflow volume was computed to be 2,350 ac.-ft.; much of this probably settled out over a large area in deposits too thin to be measured accurately by echo sounders.
6/ Both sediment and flood pools.
7/ Sediment pool only.
* Estimated or assumed.

~~1110~~ (39)

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES) TOTAL	DRAINAGE AREA (SQUARE MILES) NET	DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN AC.-FT.	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN TONS	AGENCY SUPPLYING DATA
	ARKANSAS RIVER BASIN (VAN BUREN TO LITTLE ROCK) WHITE RIVER BASIN (Continued)												
44-13	Dardanelle Reservoir	Arkansas River	Dardanelle, Ark.	1/153,703	11,333	Oct. 1964	—	460,300	2/.0532	—	—	—	CE
	do	do	do	—	—	Oct. 1965	1.08	452,600	2/.0532	*80	0.626	1,090	
	do	do	do	—	—	Apr. 1968	2.90	443,900	3/.0540	80	.321	560	
44-14	Six Mile Creek Site No. 6	Six Mile Creek	Chismville, Ark.	4.14	4.07	Oct. 1954	—	1,304.03	.446	—	—	—	SCS
	do	do	do	—	—	May 1964	9.58	1,275.62	.436	68.8	.73	1,093	
	do	do	do	—	—	Oct. 1970	6.42	1,253.26	.429	76.1	.86	1,425	
	ARKANSAS RIVER BASIN (TULSA TO VAN BUREN) Grand, Verdigris, and Lower Canadian River Basins												
45-1	Lake Wedington	Trib. of Illinois River	Fayetteville, Ark.	4.06	3.92	July 1937	—	1,260	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1947	10.1	1,249	—	—	.278	—	
45-2	Wilson	Wilson Creek	do	2.35	2.30	Oct. 1930	—	522	—	—	—	—	SCS
	do	do	do	—	—	June 1940	9.75	517	—	—	.23	—	
45-3	Lake Sapulpa	Euchee Creek	Sapulpa, Okla.	8.72	8.57	— 1913	—	1,094	—	—	—	—	SCS
	do	do	do	—	—	Dec. 1935	22.5	911	—	—	.949	—	
	do	do	do	—	—	Dec. 1946	11.0	842	—	—	.732	—	
45-4b	Brown Lake	Peaceable Creek	McAlester, Okla.	20.9	19.9	May 1943	—	4,995	.640	—	—	—	SCS
	do	do	do	—	—	July 1952	9.2	4,660	.597	54.2	1.83	2,160	
	do	do	do	—	—	Apr. 1963	10.75	4,525	.580	—	.63	743	
45-5	Lake McAlester	Bull Creek	do	30.7	28.2	— 1919	—	18,397	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1941	22	17,909	—	—	1.43	—	
45-6	Lake Okmulgee	Salt Creek	Okmulgee, Okla.	40.1	39.2	— 1928	—	10,355	—	—	—	—	SCS
	do	do	do	—	—	Apr. 1950	22	9,896	—	—	.532	—	
45-7a	Shawnee Lake	Deer Creek	Shawnee, Okla.	21.2	18.9	Aug. 1937 3/	—	3/22,600	—	—	—	—	SCS
								24,468	—	—	—	—	
	do	do	do	—	—	Dec. 1947 4/	12.3	5/23,816	—	94.72	2.8	5,776	
								23,429	—	—	—	—	
	do	do	do	—	—	Mar. 1957	9.2	5/22,327	—	94.72	2.7	5,339	
45-8	Taft Lake	Br. of Pecan Creek	Taft, Okla.	2.3	2.2	— 1937	—	580	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1947	10	574	—	—	.29	—	
45-9	Hiwassee Lake	Trib. of Deep Fk. Creek	Arcadia, Okla.	4.58	4.29	— 1936	—	2,341	—	—	—	—	SCS
	do	do	do	—	—	Apr. 1950	14	2,158	—	—	3.05	—	
45-10	Lake Carleton	Fourche Maline Creek	Wilburton, Okla.	19.8	19.7	— 1933	—	6/570	—	—	—	—	SCS
	do	do	do	—	—	July 1947	14	511	—	—	.21	—	
45-11	Holdenville City Lake	Bemmore Creek	Holdenville, Okla.	8.95	8.30	June 1931	—	9,844	—	—	—	—	SCS
	do	do	do	—	—	Apr. 1950	18.8	9,030	—	—	5.22	—	
45-12	Pretty Water Lake	Pretty Water Creek	Sapulpa, Okla.	2.43	2.40	Mar. 1936	—	344	—	—	—	—	SCS
	do	do	do	—	—	Dec. 1946	10.75	322	—	—	.85	—	
45-13	Greenleaf Lake	Big Greenleaf Creek	Muskogee, Okla.	81.25	79.84	Mar. 1937	—	13,005	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1941	4.7	12,828	—	—	.47	—	
45-15	Kirk Lake	Unnamed	Iola, Kans.	2.41	2.36	— 1897	—	111	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1939	42	69	—	48.10	.43	450	
45-16	Lowell	Sprg. R. & Shoal Creek	Baxter Springs, Kans.	2,210.0	2,208.6	Mar. 1905	—	10,404	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1939	34.4	7,580	—	*60	.04	52.3	
45-17	Neosho County State Lake (Lake McKinley).	Small Trib. of Neosho River	Parsons, Kans.	3.38	3.24	July 1927	—	680	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1939	12.1	651	—	*60	.74	967	
45-18	Lake Claremore	Dog Creek	Claremore, Okla.	56.44	55.70	May 1931	—	4,258	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1939	8.4	3,909	—	51.17	.749	835	
45-19	Lake Spavinaw	Spavinaw Creek	Spavinaw, Okla.	400.0	397.2	Apr. 1924	—	31,686	—	—	—	—	SCS
	do	do	do	—	—	July 1935	11	30,909	—	—	.269	—	
45-20	Kennamer Lake	Trib. of Pryors Creek	Chelsea, Okla.	.28	.27	— 1923	—	28	—	—	—	—	SCS
	do	do	do	—	—	— 1939	16	26.5	—	—	.35	—	
45-21	State Fish Hatchery Lake	Happy Creek	Claremore, Okla.	1.21	1.20	— 1934	—	34.0	—	—	—	—	SCS
	do	do	do	—	—	— 1939	5	32.9	—	—	.18	—	
45-22	Lake Searbow	Trib. of Pryor Creek	Pryor, Okla.	3.07	3.04	— 1931	—	123	—	—	—	—	SCS
	do	do	do	—	—	— 1939	8	111.9	—	—	.46	—	
45-23	Wewoka Lake	Coon Cr. or Spring Cr.	Wewoka, Okla.	16.27	15.72	July 1925	—	7/4,961	1.028	—	—	—	SCS
	do	do	do	—	—	Apr. 1945	19.6	4,489	.930	—	1.51	—	
	do	do	do	—	—	Feb. 1954	8.0	4,357	.903	—	8/1.05	—	
45-24	Wetumka City Lake	Salt Creek	Wetumka, Okla.	4.15	3.88	Jan. 1931	—	2,076	1.341	—	—	—	SCS
	do	do	do	—	—	Feb. 1954	23.2	1,898	1.226	—	1.98	—	
45-25	Adair	N. Caney River	Sedan, Kans.	.33	.33	Mar. 1953	—	20.9	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1960	7.5	20.2	—	55	.28	335	
45-26	Bevoy	Big Caney River	Cedar Vale, Kans.	.16	.16	Jan. 1938	—	22.8	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1960	22.7	21.2	—	60	.44	574	

45-27	Buffalo	Bee Creek	Havana, Kans.	.26	.26	—	1934	—	51.7	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1960	26	48.5	—	50	.45	490	
45-28a	Foster	N. Caney River	Sedan, Kans.	2.25	2.25	Jan.	1951	—	484	—	—	—	—	SCS
	do	do	do	—	—	Aug.	1960	9.5	477.8	—	55	.29	347	
45-29	House	Caney River	Hewins, Kans.	.25	.25	Sept.	1936	—	10.66	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1960	24	9.26	—	60	.23	300	
45-30	Herbert Miles Pond	Unnamed	Lebo, Kans.	.194	.192	Jan.	1939	—	10.59	—	—	—	—	SCS
	do	do	do	—	—	July	1957	18.5	8.56	—	*60	9/.60	9/810.2	
45-31	Kahola	Kahola Creek	Dunlap, Kans.	15.9	15.3	Dec.	1936	—	6,491	*1.591	—	—	—	[illegible]
	do	do	do	—	—	Apr.	1956	18.3	5,935	*1.455	51.6	1.99	2,236	
45-32	Mills	Big Caney River	Sedan, Kans.	.2	.2	—	1920	—	23.9	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1960	40	21.6	—	70	.28	477	
45-33	Payer Pond	Unnamed	Burlington, Kans.	.345	.345	Jan.	1938	—	54.97	—	—	—	—	SCS
	do	do	do	—	—	July	1957	19.5	44.12	—	57	1.41	1,990.8	
45-34	Staats	Middle Caney River	Cedarvale, Kans.	.49	.49	Jan.	1943	—	81.46	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1960	17.7	77.94	—	60	.41	536	
45-35	Hulah	Caney River	Hulah, Okla.	732	712	Feb.	1950	—	293,130	1.109	—	—	—	CE
	do	do	do	—	—	June	1958	8.4	292,565	1.099	44.2	.429	413	
45-36a	Double Creek Site No. 5	do	Ramona, Okla.	2.39	2.36	Feb.	1955	—	747.36	.43	—	—	—	SCS
	do	do	do	—	—	Apr.	1964	9.2	734.29	.42	54.3	.60	710	
	do	do	do	—	—	Sept.	1969	5.5	730.53	.41	54.3	.29	343	
45-37	Waldron Lake	Square Rock Creek	Waldron, Ark.	7.65	7.58	Mar.	1943	—	341.44	.059	—	—	—	SCS
	do	do	do	—	—	Oct.	1961	18.58	325.78	.053	—	.25	—	
45-38	Howard City Lake	Game Creek	Howard, Kans.	10.16	10.08	Sept.	1936	—	771.0	.324	—	—	—	SCS
	do	do	do	—	—	Sept.	1965	28.9	604.7	.248	*60	.57	745	
45-39	Heyburn Reservoir	Polecat Creek	Heyburn, Okla.	123	117	Mar.	1950	—	59,450	1.447	—	—	—	CE
	do	do	do	—	—	Dec.	1959	9.8	57,270	1.389	77.23	2.08	3,499	
45-40	Toronto Lake	Verdigris	Toronto, Kans.	730	714	Mar.	1960	—	195,300	.159	—	—	—	CE
	do	do	do	—	—	May	1966	6.21	192,060	.130	90.4	.731	[illegible]	
45-41	Eufaula Lake	Canadian	Whitefield, Okla.	47,522	13,693	Feb.	1964	—	3,848,000	.89	—	—	—	CE
	do	do	do	—	—	June	1969	5.33	3,798,400	.88	62.2	.60	952	
45-42	Hatch	Trib. Neosho River	Burlington, Kans.	.19	.18	Oct.	1939	—	4.74	.07	—	—	—	SCS
	do	do	do	—	—	Aug.	1967	28	3.56	.05	*60	.24	314	
45-43	Mound Valley Experimental Sta.	Trib. of Pumpkin Creek	Mound Valley, Kans.	.42	.42	June	1954	—	6.90	.032	—	—	—	SCS
	do	do	do	—	—	June	1968	14	4.77	.022	*60	.36	470	
45-44	Cramer	Trib. Verdigris River	Edna, Kans.	.22	.22	Nov.	1953	—	5.01	.044	—	—	—	SCS
	do	do	do	—	—	June	1968	14.6	3.92	.034	*60	.32	418	
45-45	Scott	Trib. Neosho	Parsons, Kans.	.23	.23	Dec.	1956	—	12.0	.10	—	—	—	SCS
	do	do	do	—	—	June	1968	11.8	11.1	.093	*60	.35	457	
45-46	Fletcher	Big Creek	Gridley, Kans.	.20	.19	—	1934	—	24.41	.33	—	—	—	SCS
	do	do	do	—	—	Aug.	1967	33	20.1	.27	*60	.68	[illegible]	
45-47	Isch Pond	do	do	.38	.37	—	1927	—	15.37	.110	—	—	—	SCS
	do	do	do	—	—	Aug.	1967	40	8.72	.062	*60	.46	601	
45-48	Hess Pond	Trib. Buck Creek	Elk City, Kans.	1.75	1.73	—	1933	—	53.04	.080	—	—	—	SCS
	do	do	do	—	—	July	1967	34	29.69	.045	*60	.40	522	
45-49	Glenhouse	do	La Fontaine, Kans.	.13	.13	July	1937	—	3.8	.080	—	—	—	SCS
	do	do	do	—	—	July	1967	30	3.0	.062	*60	.23	300	
45-50	Sherman	do	do	.23	.23	June	1937	—	5.3	.062	—	—	—	SCS
	do	do	do	—	—	July	1967	30	4.5	.052	*60	.13	170	
45-51	Hubert	do	Longton, Kans.	.41	.40	Oct.	1948	—	16.38	.11	—	—	—	SCS
	do	do	do	—	—	Aug.	1967	19	15.0	.098	*60	.18	235	
45-52	Meritt Pond	Big Creek	Burlington, Kans.	.25	.25	—	1939	—	8.09	.09	—	—	—	SCS
	do	do	do	—	—	Aug.	1967	28	4.17	.045	*60	.56	731	
45-53	Big Wewoka Site No. 36	Big Wewoka	Holdenville, Okla.	2.26	2.20	June	1960	—	680.3	.95	—	—	—	SCS
	do	do	do	—	—	Aug.	1969	9.1	679.0	.94	62	.56	760	
45-54	Cane Creek Site No. 11	Cane Creek	Okmulgee, Okla.	8.96	8.89	Nov.	1965	—	2,983.6	.96	—	—	—	SCS
	do	do	do	—	—	Sept.	1969	3.85	2,954.7	.95	55	.85	1,018	
45-55	Big Wewoka Site No. 17	Big Wewoka	Wewoka, Okla.	2.16	2.11	Mar.	1963	—	691.3	1.36	—	—	—	SCS
	do	do	do	—	—	Sept.	1968	5.53	680.7	1.34	60	.91	1,189	

ARKANSAS RIVER BASIN (GARDEN CITY TO TULSA)
Middle Canadian, Lower Cimarron, and Salt Fork River Basins

46-1b	Fort Supply Lake	Wolf Creek	Fort Supply, Okla.	1,735	1,485	Jan.	1943	—	107,340	1.27	—	—	—	CE
	do	do	do	—	—	June	1949	6.42	106,150	1.26	57.8	.125	157	
	do	do	do	—	—	June	1958	9.0	101,750	1.21	67.0	.329	498	
	do	do	do	—	—	Dec.	1969	11.50	100,720	1.66	65.3	.061	76	

1/ 22,241 sq. mi. is probably noncontributing.
2/ Based on inflow from net sediment contributing area.
3/ Original topographic survey.
4/ From "A" reconnaissance investigation, Shawnee Lake, by Victor H. Jones, Geologist, SCS.
5/ Present ac.-ft. as shown by the two surveys.
6/ Lake drained and dam raised 1937. Original capacity at 1938 crest.
7/ Dam raised 11 feet Mar. 1946; all values based on present elevation.
8/ Dam broke Apr. 1945; rebuilt Mar. 1946; this period not included.
9/ Includes 0.03 ac.-ft. above crest deposits.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE -FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	ARKANSAS RIVER BASIN (GARDEN CITY TO TULSA) Middle Canadian, Lower Cimarron, and Salt Fork River Basins (Continued)												
46-2a	Great Salt Plains	Salt Fk. of Arkansas River	Jet, Okla.	3,200	3,156	June 1941	—	308,000	1.067	—	—	—	CE
	do	do	do	—	—	Dec. 1949	8.5	292,000	1.011	68.6	0.586	620	
	do	do	do	—	—	Apr. 1961	11.4	280,200	.971	58.9	.336	529	
46-3	Boomer Lake	Boomer Creek	Stillwater, Okla.	9.13	8.67	Mar. 1925	—	2,812	--	—	—	—	SCS
	do	do	do	—	--	June 1935	10.25	2,441	--	*60	1.93	2,522	
46-4	Bennington's Lake	Chikaskia River	Hago, Kans.	1.42	1.40	Aug. 1929	—	75	—	—	—	--	SCS
	do	do	do	—	--	Oct. 1940	11.2	33	--	69.47	2.68	4,055	
46-5	Meade County State Lake (Lake Larrabee).	Stump Arroyo	Meade, Kans.	18.00	17.84	June 1938	—	891	--	—	—	—	SCS
	do	do	do	--	--	Apr. 1937	8.8	819	—	*60	.459	600	
46-6	Lake Medicine	Medicine Lodge Creek	Medicine Lodge, Kans.	1.89	1.84	Aug. 1929	—	365	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1940	11.2	295	—	98.52	3.40	7,296	
46-7	Santa Fe	Indianola Creek	Augusta, Kans.	37.93	37.55	Oct. 1928	—	1,741	--	—	—	--	SCS
	do	do	do	--	--	May 1937	8.6	1,595	—	58.1	.45	569	
46-8	Guthrie	Trib. of Cottonwood Creek	Guthrie, Okla.	13.30	12.95	Oct. 1920	—	3,084	—	--	—	—	SCS
	do	do	do	—	—	May 1935	14.5	2,608	--	*60	2.42	3,162	
46-9	Gelmer's Stock Pond	Bois d'Arc Creek	Blackwell, Okla.	.31	.31	Oct. 1939	—	3.76	—	--	--	—	SCS
	do	do	do	—	--	Sept. 1960	1.0	3.43	--	*65	1.0	1,416	
46-10	Harris Stock Pond	do	do	.22	.21	Apr. 1938	—	12.63	—	--	--	--	SCS
	do	do	do	--	--	Sept. 1960	2.5	12.37	--	*65	.495	702	
46-11	Lake Eldorado	Satchel Creek	Eldorado, Kans.	35.1	34.3	— 1928	—	3,213	--	—	—	—	SCS
	do	do	do	--	—	Apr. 1937	9	3,082	—	66	.426	612	
46-12a	Lake Fryer	Wolf Creek	Perryton, Tex.	108	108	-- 1939	—	844	.172	--	—	—	SCS
	do	do	do	—	--	May 1967	7.4	717	.316	—	.16	--	
46-13b	Canton Lake	North Canadian River	Canton, Okla.	12,483	1/6,081	July 1947	—	401,500	2.15	—	—	—	CE
	do	do	do	—	—	May 1953	5.83	390,800	2.10	70.9	.302	4,666	
	do	do	do	—	--	Oct. 1959	6.42	385,900	2.07	56.2	.125	65.3	
	do	do	do	--	--	Sept. 1966	6.92	383,300	2.06	56.1	.063	76.4	
46-14	Guthrie Municipal Reservoir No. 2.	Cottonwood Creek	Guthrie, Okla.	11.63	11.29	May 1949	--	3,192.68	1.391	—	--	—	SCS
	do	do	do	--	--	Sept. 1960	11.40	2,965.06	1.283	95.66	1.92	4,000.27	
46-15a	Lake Carl Blackwell	Stillwater Creek	Stillwater, Okla.	75.35	70.53	Mar. 1938	—	58,326	—	—	--	--	SCS
	do	do	do	--	—	Sept. 1958	20.50	54,556	—	*60	2.61	3,410.75	
46-16	Lies Pond	Unnamed	Andale, Kans.	3.36	3.36	June 1942	—	20.44	—	--	—	—	SCS
	do	do	do	—	--	Sept. 1956	14	9.62	—	94.89	2/.28	3/578.68	
46-17	Longton	do	Cimarron, Kans.	.55	.54	July 1935	—	3/51.10	--	—	—	—	SCS
	do	do	do	—	—	Aug. 1955	20	50.28	--	85.7	.07	134	
46-18	Hughes No. 1	do	Ingalls, Kans.	.64	.63	— 1942	—	3/8.50	—	—	—	--	SCS
	do	do	do	--	—	Aug. 1955	13	5.44	—	72.07	.32	502	
46-19	Perry City Lake	Cow Creek	Perry, Okla.	16.67	16.64	June 1937	—	4,371	1.311	—	—	—	SCS
	do	do	do	—	--	May 1955	17.9	3,986	1.196	83.5	1.33	2,419	
46-20	Pottesinger Pond	Unnamed	Andale, Kans.	.9	.9	Aug. 1949	--	14.87	--	—	—	—	SCS
	do	do	do	--	—	Sept. 1956	7	8.97	—	103.4	4/1.0	4/2,252	
46-21	O. F. Scott Ponds	Trib. of So. Canadian R.	Union City, Okla.	1.80	1.79	May 1941	--	26.3	.085	--	—	—	SCS
	do	do	do	--	—	May 1955	14	20.7	.067	65.4	.22	313	
46-22	Tom Hill Pond	Trib. of Bridge Creek	Tuttle, Okla.	.530	.526	July 1943	--	13.38	.167	—	--	—	SCS
	do	do	do	--	—	May 1955	11.8	6.43	.071	—	1.12	—	
46-23	Wichlaus	Trib. Slough Creek	Haven, Kans.	2.29	2.27	May 1932	—	46.14	.15	—	—	--	SCS
	do	do	do	—	—	May 1967	35	3/13.6	.04	70	.22	335	
46-24	Thever	Trib. Slate Creek	Wellington, Kans.	.14	.14	— 1958	—	4.09	.16	--	—	—	SCS
	do	do	do	—	--	Aug. 1967	9	3.38	.13	*60	.57	765	
46-25	Koelowrie	Trib. Sand Creek	Newton, Kans.	.24	.24	Oct. 1948	—	9.64	.219	—	—	—	SCS
	do	do	do	--	--	Sept. 1968	19.92	6.95	.158	*60	.58	758	
46-26	Adams	Trib. Bluff Creek	Anthony, Kans.	.24	.23	Sept. 1934	—	13.50	.56	—	—	—	SCS
	do	do	do	--	—	Aug. 1968	33.92	5.76	.24	*60	1.00	1,307	
46-27	Smith - Case	Trib. Little Ark. River	Little River, Kans.	.56	.56	Dec. 1958	—	66.89	1.86	—	—	—	SCS
	do	do	do	--	--	Aug. 1968	9.75	62.29	1.73	*60	.84	1,098	
46-28	Workman	Trib. Medicine Lodge River	Medicine Lodge, Kans.	.59	.59	June 1936	—	10.0	.18	—	—	—	SCS
	do	do	do	--	—	Aug. 1968	32.17	1.79	.03	*60	.44	575	
46-29	Gant	do	do	.30	.30	Mar. 1955	--	25.26	.87	—	—	—	SCS
	do	do	do	--	—	Aug. 1968	13.42	20.29	.70	*60	1.23	1,607	
46-30	Schuphach	do	Kiowa, Kans.	.34	.34	June 1956	—	26.73	.82	—	—	—	SCS
	do	do	do	—	--	Aug. 1968	12.17	21.91	.66	*60	1.18	1,542	
46-31	Barrett	Wild Creek	Anthony, Kans.	.67	.67	Spring 1957	—	39.92	.99	—	—	—	SCS
	do	do	do	--	--	July 1968	11.25	32.24	.47	*60	1.01	1,320	
46-32	Miller	Beaver Creek	Walton, Kans.	1.20	1.20	Aug. 1959	—	6.08	.028	—	—	—	SCS
	do	do	do	--	—	July 1968	9	2.87	.023	*60	.30	392	

46-33	Rempp	Trib. Sand Creek	Hesston, Kans.	.49	.49	June	1950	—	5.47	.066	—	—	—	SCS
	—do—	—do—	—do—	—	—	Sept.	1968	18.12	3.33	.037	*60	.24	314	
46-34	Mease	Trib. Medicine Lodge River	Medicine Lodge, Kans.	1.73	1.71	Feb.	1961	—	108.3	.65	—	—	—	SCS
	—do—	—do—	—do—	—	—	Aug.	1968	7.5	105.19	.63	*60	.24	314	
46-35	Berger Pond	Trib. Pawnee River	Jetmore, Kans.	3.0	3.0	Mar.	1952	—	18.55	.29	—	—	—	SCS
	—do—	—do—	—do—	—	—	Aug.	1967	15.5	12.95	.20	*60	.12	156	
46-36	Paris	Trib. Wet Walnut Creek	Dighton, Kans.	3.6	2.2	Aug.	1940	—	41.69	.87	—	—	—	SCS
	—do—	—do—	—do—	—	—	Aug.	1967	27	36.66	.76	*60	.09	117	
46-37	Siebert	Trib. Big Sandy	Meade, Kans.	.23	.23	Jan.	1952	—	8.0	1.6	—	—	—	SCS
	—do—	—do—	—do—	—	—	June	1966	14.5	7.15	1.5	80	.26	453	
46-38	Hoop	Trib. Crooked Creek	—do—	1.07	.90	May	1961	—	4.0	.19	—	—	—	SCS
	—do—	—do—	—do—	—	—	June	1966	5.2	3.76	.19	80	.06	104	
46-39	Harris	—do—	—do—	7.57	4.75	Oct.	1962	—	161.4	1.1	—	—	—	SCS
	—do—	—do—	—do—	—	—	June	1966	3.7	160.8	1.1	*70	.04	61	
46-40	Whitford	Trib. Hackberry Creek	Ashland, Kans.	1.98	1.97	May	1947	—	14.2	.22	—	—	—	SCS
	—do—	—do—	—do—	—	—	July	1966	19.2	8.2	.13	75	.15	245	
46-41	Davis	Pawnee	Kalvesta, Kans.	2.40	2.37	Jan.	1951	—	104.82	3.28	—	—	—	SCS
	—do—	—do—	—do—	—	—	Sept.	1967	16.75	97.94	3.06	*60	.17	222	
46-42	Lippoldt	Trib. Pawnee River	Jetmore, Kans.	1.83	1.82	Dec.	1952	—	6/30.5	.78	—	—	—	SCS
	—do—	—do—	—do—	—	—	Aug.	1967	14.75	27.74	.71	*60	.10	131	
46-43	Sebes Pond	—do—	—do—	1.20	1.20	July	1956	—	5.6	.22	—	—	—	SCS
	—do—	—do—	—do—	—	—	Aug.	1967	11.13	4.34	.17	*60	.09	117	
46-44	Fry	Trib. Ark. River	Little River, Kans.	1.07	1.07	Aug.	1949	—	4.13	.06	—	—	—	SCS
	—do—	—do—	—do—	—	—	Aug.	1968	19	1.37	.02	*60	.1.	183	
46-45	Barber	—do—	Raymond, Kans.	.57	.57	June	1962	—	21.50	.60	—	—	—	SCS
	—do—	—do—	—do—	—	—	June	1968	6.2	17.97	.50	*70	1.0	1,525	
46-46	Coberly	Trib. Buffalo Creek	Dighton, Kans.	2.1	2.1	Aug.	1946	—	18.0	.65	—	—	—	SCS
	—do—	—do—	—do—	—	—	Aug.	1967	21	12.93	.48	*60	.11	143	
46-47	Smith Pond	Trib. Pawnee River	Jetmore, Kans.	.30	.30	Dec.	1951	—	5.93	.93	—	—	—	SCS
	—do—	—do—	—do—	—	—	Aug.	1967	15.75	3.56	.59	*60	.50	653	
46-48	Seltman	Trib. Walnut Creek	Rush Center, Kans.	1.63	1.61	Oct.	1958	—	26.07	.43	—	—	—	SCS
	—do—	—do—	—do—	—	—	Aug.	1967	8.8	22.23	.37	*60	.27	352	
46-49	Rayl	Trib. Slate Creek	Wellington, Kans.	.56	.56	—	1949	—	5.44	.05	—	—	—	SCS
	—do—	—do—	—do—	—	—	Aug.	1967	18	2.96	.03	*60	.25	326	
46-50	Lange	—do—	Conway Springs, Kans.	.31	.31	—	1956	—	8.11	.14	—	—	—	SCS
	—do—	—do—	—do—	—	—	Aug.	1967	11	5.37	.09	*60	.61	1,058	
46-51	Brodie	Spring Creek	Ashland, Kans.	2.17	2.0	June	1951	—	31.2	.36	—	—	—	SCS
	—do—	—do—	—do—	—	—	July	1966	15.1	29.0	.33	*70	.07	107	
46-52	Glen	Trib. Little Sandy Creek	—do—	.95	.93	Nov.	1958	—	57.1	1.88	—	—	—	SCS
	—do—	—do—	—do—	—	—	July	1966	7.75	54.5	1.79	*60	.35	457	
46-53	Isaac	Trib. Big Sandy	Meade, Kans.	.82	.52	Jan.	1952	—	6.65	.38	—	—	—	SCS
	—do—	—do—	—do—	—	—	June	1966	14.5	4.8	.27	75	.25	408	
46-54	Fox	Trib. Bluff Creek	Ashland, Kans.	2.18	2.17	July	1954	—	10.0	.11	—	—	—	SCS
	—do—	—do—	—do—	—	—	July	1966	12	7.3	.08	*65	.11	156	

ARKANSAS RIVER BASIN (LAMAR TO GARDEN CITY)

Upper Cimarron and Upper Canadian River Basins

47-1b	Conchas Reservoir	Canadian and Conchas	Conchas Dam, N. Mex.	7,409	6,976	Jan.	1939	—	601,112	3.13	—	—	—	CE
	—do—	—do—	—do—	—	—	May	1940	1.4	599,712	3.12	75.7	—	—	
	—do—	—do—	—do—	—	—	June	1942	2.1	585,112	3.04	75.7	.996	1,643	
	—do—	—do—	—do—	—	—	Nov.	1942	.4	581,112	3.02	75.7	—	—	
	—do—	—do—	—do—	—	—	Oct.	1944	1.9	576,756	3.00	75.7	.328	541	
	—do—	—do—	—do—	—	—	Feb.	1949	4.3	566,163	2.95	*75.7	.353	581	
	—do—	—do—	—do—	—	—	Oct.	1963	14.7	550,799	2.87	*75.7	.150	247	
	—do—	—do—	—do—	—	—	Oct.	1970	6.92	528,951	2.75	75.7	.453	746	
47-2	Reservoir No. 2	(Offstream)	Maxwell, N. Mex.	—	—	—	1912	—	3,010	—	—	—	—	BR
	—do—	—do—	—do—	—	—	—	1946	34	1,836	—	—	—	—	
47-3	Reservoir No. 7 and 8	—do—	—do—	—	—	—	1912	—	7/1,064	—	—	—	—	BR
	—do—	—do—	—do—	—	—	—	1946	34	2,063	—	—	—	—	
47-4	Reservoir No. 11	—do—	—do—	—	—	—	1912	—	8/1,004	—	—	—	—	BR
	—do—	—do—	—do—	—	—	—	1946	34	637	—	—	—	—	
47-5	Reservoir No. 12	—do—	—do—	—	—	—	1912	—	9/2,260	—	—	—	—	BR
	—do—	—do—	—do—	—	—	—	1946	34	1,822	—	—	—	—	
47-6	Reservoir No. 13	—do—	—do—	—	—	—	1912	—	10/2,236	—	—	—	—	BR
	—do—	—do—	—do—	—	—	—	1946	34	1,628	—	—	—	—	
47-7	Reservoir No. 14	—do—	—do—	—	—	—	1912	—	11/816	—	—	—	—	BR
	—do—	—do—	—do—	—	—	—	1946	34	680	—	—	—	—	
47-8	Boles	Cimarron	Liberal, Kans.	.36	.36	Mar.	1962	—	9.16	1.9	—	—	—	SCS
	—do—	—do—	—do—	—	—	June	1966	4.25	8.98	1.9	*65	.12	170	

[1] Excludes 4,642 sq. mi. of watershed not contributed to runoff, 1,735 sq. mi. above Fort Supply Dam, and 25 sq. mi. surface area of Canton Reservoir.
[2] Includes 2.33 ac.-ft. above crest deposits.
[3] Water supply pool capacity. Reservoir has greater capacity at spillway crest elevation.
[4] Includes 0.39 ac.-ft. above crest deposits.
[5] Spillway eroded 2 ft.
[6] Capacity based on surface area x 1/3 deepest fill.
[7] During the period 1912-46, a total of 2,435-ac.-ft. capacity was added by reservoir enlargement.
[8] During the period 1912-46, a total of 126-ac.-ft. capacity was added by reservoir enlargement.
[9] During the period 1912-46, a total of 672-ac.-ft. capacity was added by reservoir enlargement.
[10] During the period 1912-46, a total of 490-ac.-ft. capacity was added by reservoir enlargement.
[11] During the period 1912-46, a total of 264-ac.-ft. capacity was added by reservoir enlargement.
* Estimated or assumed.

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SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	ARKANSAS RIVER BASIN (LAMAR TO GARDEN CITY) Upper Cimarron and Upper Canadian River Basins (Continued)												
47-9	Gregory	Trib. Ark. River	Syracuse, Kans.	6.5	6.5	Apr. 1951	—	62.2	1.79	—	—	—	SCS
	do	do	do	—	—	June 1967	16.5	50.83	1.50	70	0.11	167	
47-10	Lahey	Trib. Cimarron	Moscow, Kans.	2.78	2.75	Oct. 1960	—	135.6	4.6	—	—	—	SCS
	do	do	do	—	—	June 1966	5.7	133.8	4.5	*50	.11	120	
47-11	Hartshorn	Trib. Little Bear Creek	Syracuse, Kans.	1.90	1.89	Mar. 1950	—	14.6	.72	—	—	—	SCS
	do	do	do	—	—	June 1966	16.25	8.75	.43	*75	.19	310	
47-12	Christian	Trib. Cimarron	Ulysses, Kans.	1.06	1.06	June 1961	—	4.5	.40	—	—	—	SCS
	do	do	do	—	—	June 1966	5	3.75	.33	*75	.14	229	
47-13	Downing	do	Moscow, Kans.	.47	.46	Aug. 1961	—	31.8	6.4	—	—	—	SCS
	do	do	do	—	—	June 1966	4.8	31.2	6.2	65	.28	396	
47-14	Amerine	Trib. Little Bear Creek	Syracuse. Kans.	3.42	3.40	Mar. 1953	—	128	3.5	—	—	—	SCS
	do	do	do	—	—	June 1966	13.3	119	3.3	*75	.20	327	
47-15	Roy Kurs	Shirley	do	8.91	8.91	Apr. 1951	—	92.7	1.97	—	—	—	SCS
	do	do	do	—	—	June 1967	16.5	78.2	1.65	*70	.10	152	
	RIO GRANDE BASIN (ABOVE ESPANOLA) AND ARKANSAS RIVER BASIN												
48-1d	John Martin Reservoir (formerly Caddoa Res. Proj.).	Arkansas River	Hasty, Colo.	1/18,915	18,102	Apr. 1942	—	701,775	2.47	—	—	—	CE
	do	do	do	—	—	July 1942	0.3	690,345	2.43	*75.7	—	—	
	do	do	do	—	—	Dec. 1943	1.4	688,550	2.43	*75.7	.075	124	
	do	do	do	—	—	Sept. 1944	0.7	683,257	2.41	*75.7	.443	730	
	do	do	do	—	—	May 1948	3.7	675,097	2.38	*75.7	.129	223	
	do	do	do	—	—	Oct. 1951	3.4	662,870	2.34	*75.7	.210	346	
	do	do	do	—	—	Aug. 1957	5.7	645,512	2.28	*75.7	.178	295	
	do	do	do	—	—	Mar. 1962	4.6	642,390	2.26	*75.7	.0398	65.6	
	do	do	do	—	—	Sept. 1966	4.5	631,121	2.22	*75.7	.147	242	
	do	do	do	—	—	Aug. 1968	1.9	618,668	2.18	*75.7	.362	597	
48-2	Brown Reservoir No. 1	Van Bremer Arroyo	Trinidad, Colo.	74.6	74.4	— 1900	—	758	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1939	39	82	—	89.07	.233	452	
48-3	Muddy Creek	Muddy Creek, Johnny Creek	Caddoa, Colo.	154.2	152.4	Fall 1919	—	16,918	—	—	—	—	SCS
	do	do	do	—	—	Dec. 1939	20	15,287	—	75.25	.535	877	
48-4	Horse Creek 2/	Horse Creek	Ordway, Colo.	52.01	47.44	Nov. 1900	—	36,203	—	—	—	—	SCS
	do	do	do	—	—	Apr. 1940	39.4	30,738	—	68.36	3/.241	4/1,515	
48-5	Teller	Turkey Creek	Pueblo, Colo.	78.8	78.5	Mar. 1921	—	4,005	—	—	—	—	SCS
	do	do	do	—	—	Feb. 1960	28.9	2,463	—	75.4	.680	1,117	
48-6	Cucharas	Cucharas River	Walsenburg, Colo.	608	608	— 1912	—	38,274	—	—	—	—	BR
	do	do	do	—	—	— 1937	25	25,020	—	—	.87	—	
	do	do	do	—	—	— 1939	2	23,040	—	—	1.63	—	
48-7	S-1 Big Sandy Creek Watershed	Big Sandy Creek	Peyton, Colo.	5.4	5.3	May 1962	—	326	—	—	—	—	SCS
	do	do	do	—	—	July 1965	3	302	—	*80	1.5	2,613	
48-8	Abiquiu Reservoir	Rio Chama	Abiquiu, N. Mex.	2,146	2,127	Apr. 1963	—	579,039	1.80	—	—	—	CE
	do	do	do	—	—	Oct. 1967	4.58	572,695	1.78	*75.7	.65	1,072	
48-9	Hardesty Reservoir	Hungerford Hollow	Fowler, Colo.	13.48	13.34	— 1908	—	563	*3.9	—	—	—	SCS
	do	do	do	—	—	Mar. 1968	60	527	*3.7	—	5/.045	—	
	RED RIVER BASIN (DENISON TO GRAND ECORE) Little and Sulphur River Basins												
49-1a	Lake Crook	Pine Creek	Paris, Tex.	51.6	49.6	Feb. 1923	—	11,487	.418	—	—	—	SCS
	do	do	do	—	—	Mar. 1936	13.1	10,755	.391	—	1.13	—	
	do	do	do	—	—	July 1956	19.7	9,964	.362	36.4	.81	642	
49-2a	Lake Gibbons	Trib. of Pine Creek	do	1.46	1.26	— 1900	—	6/1,394	1.792	—	—	—	SCS
	do	do	do	—	—	Mar. 1936	36	1,324	1.702	—	1.54	—	
	do	do	do	—	—	July 1956	20.3	1,285	1.652	31.5	1.52	1,043	
49-3	Nashville	Mine Creek	Nashville, Ark.	10.4	10.3	Mar. 1931	—	181	—	—	—	—	SCS
	do	do	do	—	—	July 1941	10.3	128	—	—	.50	—	
49-4	Jenkins Pond	Trib. of Lewis Creek	Mansfield, La.	.35	.32	Sept. 1925	—	157	.561	—	—	—	SCS
	do	do	do	—	—	Sept. 1954	29	150	.536	68.6	.78	1,165	
49-5	Gordon Country Club Lake	Ands Creek	Paris, Tex.	1.41	1.30	— 1898	—	558	.742	—	—	—	SCS
	do	do	do	—	—	June 1959	61.0	430	.572	33.14	1.62	1,169	
49-6	Bayou Bodcau	Bayou Bodcau River	Cotton Valley, La.	683	613	Nov. 1949	—	967,900	1.516	—	—	—	CE
	do	do	do	—	—	May 1961	11.5	967,900	1.516	—	—	—	

49-7a	Lake Texarkana	Sulphur River	Texarkana, Tex.	3,400	3,213	Sept.	1954	—	2,654,300	.13	—	—	—	CE
	do	do	do	—	—	Aug.	1958	3.92	2,654,300	.13	—	—	—	
	do	do	do	—	—	July	1970	12	2,654,300	.13	—	—	—	
49-8	Wallace Lake	Cypress Bayou	Shreveport, La.	266	251	Dec.	1946	—	96,100	.405	—	—	—	CE
	do	do	do	—	—	Oct.	1951	4.8	96,100	.405	—	—	—	
	do	do	do	—	—	Apr.	1961	9.5	96,100	.405	—	—	—	
49-9	Century Lake	Sulphur River	Sulphur Springs, Tex.	52.50	51.46	—	1953	—	3,495.2	.125	—	—	—	SCS
	do	do	do	—	—	Sept.	1962	9	2,787.9	.100	*85	1.53	2,832	
			RED RIVER BASIN (ABOVE DENISON)											
50-1	Ardmore Club Lake	Caddo Creek	Ardmore, Okla.	4.15	3.91	Dec.	1922	—	1,797	—	—	—	—	SCS
	do	do	do	—	—	June	1938	15.5	1,644	—	40.7	2.52	2,236	
50-2	Byars Club Lake	Unnamed Stream	Byars, Okla.	2.66	2.55	—	1904	—	907	—	—	—	—	SCS
	do	do	do	—	—	—	1950	46	371	—	—	1.16	—	
50-3	Carter Lake	Big Glasses Creek	Madill, Okla.	1.81	1.70	—	1936	—	865	—	—	—	—	SCS
	do	do	do	—	—	Nov.	1949	13	837	—	—	1.26	—	
50-4	J. J. Harrison Lake	Trib. of Washita River	Lindsay, Okla.	.88	.81	Feb.	1932	—	349	—	—	—	—	SCS
	do	do	do	—	—	Mar.	1950	18	282	—	—	4.59	—	
50-5	C. W. Lester Farm Pond No. 1	Trib. of Broken Leg Creek	Cheyenne, Okla.	2.06	2.03	—	1945	—	42.4	—	—	—	—	SCS
	do	do	do	—	—	June	1949	4	22.8	—	—	2.41	—	
50-6	C. W. Lester Farm Pond No. 2	do	do	.64	.63	June	1944	—	16.3	—	—	—	—	SCS
	do	do	do	—	—	June	1949	5.0	13.1	—	—	1.09	—	
50-7	Santa Rosa Lake	Beaver Creek	Vernon, Tex.	336	334	Oct.	1929	—	15,755	—	—	—	—	SCS
	do	do	do	—	—	Jan.	1948	18.2	11,568	—	—	.689	—	
50-8	Lake Duncan	Fitzpatrick Creek	Duncan, Okla.	11.0	10.4	Oct.	1937	—	6,291	—	—	—	—	SCS
	do	do	do	—	—	Aug.	1950	12.8	5,783	—	63.4	3.82	5,275	
50-9	Lake Clinton	Turkey Creek	Canute, Okla.	23.6	23.1	Dec.	1930	—	4,415	—	—	—	—	SCS
	do	do	do	—	—	June	1938	7.4	3,981	—	63.36	2.54	3,505	
	do	do	do	—	—	Nov.	1950	12.4	3,343	—	65.9	2.23	3,202	
50-10	Bellevue	Clay Creek	Bellevue, Tex.	*1.5	1.44	—	1888	—	131	—	—	—	—	SCS
	do	do	do	—	—	May	1938	50	85	—	—	.44	—	
50-11c	Altus Reservoir	North Fork Red River	Altus, Okla.	2,515	2,104	Dec.	1940 7/	—	192,842	—	—	—	—	BR
	do	do	do	—	—	June	1948	7.5	185,035	—	52.3	.495	964	
	do	do	do	—	—	July	1953	5.1	178,610	1.74	66.9	.599	1,104	
	do	do	do	—	—	Apr.	1967	13.8	168,117	1.61	70.2	.361	988	
50-12b	Lake Texoma (Denison Dam)	Red River	Denison, Tex.	39,719	28,925	July	1942	—	5,859,000	—	—	—	—	CE
	do	do	do	—	—	Oct.	1948	6.2	5,718,000	—	52.1	.785	891	
	do	do	do	—	—	June	1954	5.7	5,553,000	—	57.9	1.00	1,261	
	do	do	do	—	—	Mar.	1962	7.8	5,392,900	—	62.5	.709	965	
50-13	Barbour Pond	Trib. of Little Washita R.	Chickasha, Okla.	.68	.67	Sept.	1935	—	59.9	.512	—	—	—	SCS
	do	do	do	—	—	May	1955	19.7	41.8	.357	*75	1.37	2,238	
50-14a	Cavalry Creek Site No. 1	Washita	Cordell, Okla.	2.19	2.15	July	1948	—	505.4	3.05	—	—	—	SCS
	do	do	do	—	—	Sept.	1959	11.15	476.6	2.87	74.5	1.20	1,946	
	do	do	do	—	—	Aug.	1964	4.89	471.8	2.84	74.5	.46	746	
	do	do	do	—	—	June	1969	4.85	458.8	2.77	*74	1.25	1,993	
50-15a	Chigley Sandy Site No. 5	Chigley Sandy	Wynnewood, Okla.	.81	.79	June	1955	—	263.67	1.410	—	—	—	SCS
	do	do	do	—	—	Aug.	1959	4.12	258.74	1.384	60.3	1.52	1,996	
	do	do	do	—	—	Oct.	1963	4.15	248.20	1.327	60.3	3.22	4,229	
50-16	Coit Pond No. 1	Unnamed	Clinton, Okla.	.39	.38	Mar.	1947	—	25.69	.706	—	—	—	SCS
	do	do	do	—	—	July	1957	10.28	21.53	.591	61.49	1.07	1,433	
50-17	Dean Pond No. 1	Trib. of Nine Mile Creek	Cheyenne, Okla.	.0359	.0354	Spring	1944	—	1.078	.469	—	—	—	SCS
	do	do	do	—	—	Mar.	1955	11	.807	.351	91	.69	1,368	
50-18	Dean Pond No. 2	do	do	.164	.161	Spring	1941	—	15.8	1.505	—	—	—	SCS
	do	do	do	—	—	Mar.	1955	14	13.4	1.276	88	1.06	2,032	
50-19	George Pond	Unnamed	Canadian, Tex.	.535	.535	June	1952	—	15.197	.407	—	—	—	SCS
	do	do	do	—	—	Apr.	1958	5.796	13.463	.361	70.95	.559	863.82	
50-20	Hall Pond No. 1	do	Loedey, Okla.	.20	.20	May	1939	—	17.59	.239	—	—	—	SCS
	do	do	do	—	—	Aug.	1957	18.25	13.47	.183	*70.2	1.15	1,758.30	
50-21	Harrison No. 1	do	Canadian, Tex.	.237	.237	May	1952	—	22.163	.594	—	—	—	SCS
	do	do	do	—	—	Apr.	1958	5.93	21.706	.581	79.68	.325	564.01	
50-22	Harrison No. 2	do	do	.292	.292	Sept.	1951	—	15.655	.419	—	—	—	SCS
	do	do	do	—	—	Apr.	1958	6.59	14.242	.382	68.53	.733	1,096.06	
50-23	Lake Kemp	Wichita River	Seymour, Tex.	2,099	2,067	Oct.	1922	—	560,000	2.493	—	—	—	SCS
	do	do	do	—	—	Sept.	1958	36	461,757	2.056	—	1.32	—	
50-24a	Mill Creek No. 17	Washita	Mill Creek, Okla.	1.61	1.58	Dec.	1948	—	498.45	1.06	—	—	—	SCS
	do	do	do	—	—	July	1959	10.63	492.13	1.04	70	.37	564	
	do	do	do	—	—	Aug.	1966	7.06	487.11	1.03	*75	.45	816	
50-25	Moncrief Farm Pond	Trib. of Sandy Creek	Wynnewood, Okla.	.031	.029	Aug.	1935	—	8.710	—	—	—	—	SCS
	do	do	do	—	—	Nov.	1957	22.22	7.968	—	*60	1.15	1,502.82	

1/ Drainage area adjusted to conform with U.S.G.S. published drainage area.

2/ Off channel reservoir.

3/ Excludes water and sediment diverted from Arkansas River and Horse Creek.

4/ Per 100 ac.-ft. of water diverted from Ark. River and Horse Cr. Total of 564,918 ac.-ft. diverted to reservoir between 1910 and 1939.

5/ Little deposition due to dam washout, 1930-47. True sediment accumulation rate for 43-yr period was about 0.063 ac.-ft./mi^2-yr.

6/ Spillway crest was lowered 3 ft. in 1932; capacities are based on present elevation.

7/ Date of original survey for new dam over deposits placed behind old dam.

* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
						RED RIVER BASIN (ABOVE DENISON) (Continued)							
90-26a	Cobb Creek No. 3	Washita	Weatherford, Okla.	8.28	8.18	Jan. 1957	—	2,408.1	2.72	—	—	—	SCS
	do	do	do	—	—	Aug. 1960	3.58	2,303.3	2.61	90	3.34	6,547	
	do	do	do	—	—	Oct. 1964	4.14	2,277.3	2.58	90	.77	1,509	
	do	do	do	—	—	Aug. 1970	5.81	2,218.1	2.51	*81	1.26	2,563	
90-27b	Sandstone Site No. 1	do	Hammon, Okla.	5.33	5.22	May 1951	—	1,591.29	4.67	—	—	—	SCS
	do	do	do	—	—	Apr. 1956	4.96	1,453.69	4.26	61.43	5.31	7,111	
	do	do	do	—	—	May 1960	4.06	1,380.47	4.05	83.11	3.46	6,263	
	do	do	do	—	—	Aug. 1965	5.02	1,344.75	3.94	83.11	1.36	2,462	
	do	do	do	—	—	July 1970	4.92	1,338.82	3.93	*83	.23	360	
90-28b	Sandstone Site No. 3	do	Elk City, Okla.	.62	.61	Apr. 1951	—	157.68	4.38	—	—	—	SCS
	do	do	do	—	—	Oct. 1956	5.47	148.40	4.12	70.20	2.79	4,266	
	do	do	do	—	—	Oct. 1961	5.00	139.98	3.89	77.87	2.75	4,672	
	do	do	do	—	—	July 1966	4.80	125.60	3.49	*77	4.92	8,184	
90-29a	Sandstone Site No. 5	do	do	3.89	3.86	Mar. 1951	—	1,273.21	4.65	—	—	—	SCS
	do	do	do	—	—	July 1957	6.39	1,217.58	4.26	95.7	2.27	4,731	
	do	do	do	—	—	Sept. 1961	4.19	1,152.23	4.03	—	4.08	5,902	
	do	do	do	—	—	July 1966	4.83	1,127.06	3.94	*80	1.36	1,980	
90-30b	Sandstone Site No. 6	Sandstone	do	6.46	5.24	Apr. 1951	—	1,956.05	4.12	—	—	—	SCS
	do	do	do	—	—	Oct. 1962	11.53	1,813.2	3.82	70.7	2.36	3,634	
	do	do	do	—	—	Sept. 1967	4.96	1,806.22	3.80	*72	.27	529	
90-31a	Sandstone Site No. 9	do	do	3.50	3.46	Mar. 1951	—	1,275.09	4.94	—	—	—	SCS
	do	do	do	—	—	Oct. 1957	6.58	1,217.59	4.72	75.78	2.52	4,160	
	do	do	do	—	—	Oct. 1962	5.0	1,178.72	4.57	79.4	2.20	4,148	
	do	do	do	—	—	Sept. 1967	4.93	1,175.25	4.56	*80	.20	436	
90-32b	Sandstone Site No. 10A	Washita	do	2.87	2.80	Apr. 1951	—	1,066.02	6.23	—	—	—	SCS
	do	do	do	—	—	Oct. 1956	5.50	1,018.8	6.06	79.3	1.77	3,057	
	do	do	do	—	—	Sept. 1961	4.90	963.9	5.62	82.8	5.46	9,996	
	do	do	do	—	—	July 1966	4.80	888.0	5.29	*75	4.16	5,627	
90-33b	Sandstone Site No. 14	do	do	1.02	1.00	Sept. 1951	—	315.15	4.85	—	—	—	SCS
	do	do	do	—	—	May 1960	8.68	288.09	4.43	93.08	3.12	6,320	
	do	do	do	—	—	Aug. 1965	5.25	286.79	4.40	68.1	.25	371	
	do	do	do	—	—	July 1970	4.98	275.82	4.24	*75	2.20	3,611	
90-34b	Sandstone Site No. 16	do	do	11.47	11.28	Aug. 1952	—	4,463.43	7.29	—	—	—	SCS
	do	do	do	—	—	July 1957	4.92	4,296.49	7.02	77.96	3.06	5,161	
	do	do	do	—	—	Sept. 1961	4.21	4,164.87	6.81	76.85	2.73	4,209	
	do	do	do	—	—	Aug. 1966	4.86	4,038.34	6.60	*76	2.31	3,874	
90-35b	Sandstone Site No. 16A	do	Cheyenne, Okla.	8.78	5.11	Dec. 1951	—	2,065.88	4.41	—	—	—	SCS
	do	do	do	—	—	Oct. 1956	4.82	2,033.89	4.35	80.6	1.30	2,281	
	do	do	do	—	—	Sept. 1961	4.88	1,987.93	4.25	79.79	1.84	3,181	
	do	do	do	—	—	Aug. 1966	4.86	1,979.45	4.23	*77	.34	402	
90-36b	Sandstone Site No. 17	Current Creek	do	10.13	10.06	Aug. 1951	—	3,586.9	5.53	—	—	—	SCS
	do	do	do	—	—	Oct. 1956	5.13	3,465.8	5.35	70.4	2.31	3,540	
	do	do	do	—	—	Oct. 1960	4.04	3,322.4	5.13	59	3.53	5,418	
	do	do	do	—	—	Aug. 1965	4.79	3,292.7	5.08	59	.62	797	
	do	do	do	—	—	June 1970	4.91	3,276.0	5.06	*60	.34	526	
90-37a	Sandstone Site No. 22	Sandstone	do	2.25	2.20	Aug. 1951	—	970.7	6.14	—	—	—	SCS
	do	do	do	—	—	Oct. 1957	6.16	942.12	5.97	81.53	2.08	3,694	
	do	do	do	—	—	Oct. 1962	5.0	913.51	5.78	79.4	2.64	4,445	
	do	do	do	—	—	Sept. 1967	4.96	873.9	5.63	*83	3.63	7,036	
90-38	Stickley Pond No. 4	Canadian River	Canadian, Tex.	.171	.171	Jan. 1947	—	15.796	.329	—	—	—	SCS
	do	do	do	—	—	Apr. 1958	11.266	13.963	.290	77.65	.959	1,621.88	
90-39	Stickley Pond No. 6	do	do	.162	.162	Oct. 1945	—	21.035	.438	—	—	—	SCS
	do	do	do	—	—	Apr. 1958	12.564	16.627	.346	85.34	2.167	4,027.82	
90-40	Wheeler Farm Pond	do	do	.205	.205	Dec. 1944	—	7.353	.197	—	—	—	SCS
	do	do	do	—	—	Apr. 1958	13.33	6.673	.179	82.73	.249	448.46	
90-41b	Whiteshield Creek Site No. 4	Washita	Elk City, Okla.	.62	.60	Jan. 1949	—	223.4	4.33	—	—	—	SCS
	do	do	do	—	—	Sept. 1959	10.70	207.7	4.02	75.68	2.45	4,038.4	
	do	do	do	—	—	Aug. 1964	4.91	199.6	3.87	75.68	2.75	4,532.9	
	do	do	do	—	—	June 1969	4.85	179.9	3.49	*75	6.77	10,872	
90-42b	Wildhorse Site No. 1	Wildhorse	Davis, Okla.	.97	.95	May 1949	—	262.4	1.11	—	—	—	SCS
	do	do	do	—	—	July 1959	10.25	236.2	1.08	61	.63	836.1	
	do	do	do	—	—	Oct. 1963	4.25	233.8	1.07	61	.60	796.4	
	do	do	do	—	—	July 1968	4.82	229.3	1.05	*61	.98	1,276.6	
90-43a	Wildhorse Creek Site No. 33	do	Duncan, Okla.	1.77	1.73	Mar. 1950	—	587.30	1.780	—	—	—	SCS
	do	do	do	—	—	Sept. 1960	10.50	566.24	1.716	85	1.16	2,167	
	do	do	do	—	—	Aug. 1965	4.95	548.66	1.663	74	2.05	3,306	

90-44b	Owl Creek No. 1	Owl Creek	Wayne, Okla.	.61	.59	Apr.	1949	—	206.3	.91	—	—	—	SCS
	do.	do.	do.	—	—	Aug.	1959	10.32	200.0	.88	65.5	1.07	1,527.2	
	do.	do.	do.	—	—	Oct.	1963	4.12	196.0	.86	65.5	2.09	3,166.6	
	do.	do.	do.	—	—	Aug.	1968	4.84	190.3	.84	*63	1.29	1,721.1	
90-45a	Chigley Sandy Site No. 4	Washita	Wynnewood, Okla.	3.80	3.73	Aug.	1955	—	1,075.3	1.26	—	—	—	SCS
	do.	do.	do.	—	—	Mar.	1958	2.62	1,054.8	1.21	51.61	2.10	2,361	
	do.	do.	do.	—	—	Oct.	1963	5.52	1,018.0	1.17	51.61	1.79	2,012	
	do.	do.	do.	—	—	July	1969	5.76	966.7	1.11	*59	2.39	3,456	
90-46	Flood Retarding Structure No. 2 Rush Cr. Watershed	Rush Creek	Rush Springs, Okla.	2.13	2.05	Aug.	1959	—	655.99	1.989	—	—	—	SCS
	do.	do.	do.	—	—	July	1965	5.90	639.40	1.882	77.75	1.36	2,305	
90-47a	Barnitz No. 14	Barnitz	Clinton, Okla.	4.22	4.11	Nov.	1958	—	1,723.2	4.28	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1963	4.85	1,665.9	4.08	*70	3.87	5,980	
	do.	do.	do.	—	—	Aug.	1968	4.87	1,633.9	4.05	*70	.42	677.9	
90-48	Sugar Creek Site No. 13	Sugar Creek	Hinton, Okla.	1.99	1.93	Feb.	1964	—	532.17	2.137	—	—	—	SCS
	do.	do.	do.	—	—	Oct.	1965	1.70	505.79	2.023	82.27	8.65	15,499	
90-49	Upper Washita River Site #25	Washita River	Canadian, Tex.	7.14	6.96	Nov.	1961	—	1,315.92	4.62	—	—	—	SCS
	do.	do.	do.	—	—	July	1966	4.6	1,312.76	4.61	91.8	1/.10	1/199.9	
90-50	Kent Creek Watershed Site #1	Kent Creek	Quitaque, Tex.	1.52	1.46	Apr.	1964	—	622.01	15.4	—	—	—	SCS
	do.	do.	do.	—	—	June	1966	2.1	613.03	15.2	61	1/2.67	1/3.547	
90-51	Rush Creek No. 2	Rush Creek	Rush Springs, Okla.	2.13	2.05	Aug.	1959	—	656.0	2.31	—	—	—	SCS
	do.	do.	do.	—	—	July	1965	5.9	639.6	2.25	77.75	1.36	2,303	
	do.	do.	do.	—	—	Sept.	1970	5.19	635.4	2.24	*77	.39	634	
90-52	Saddle Mountain No. 3	Saddle Mountain Creek	Carnegie, Okla.	3.43	3.37	Apr.	1959	—	771.3	2.13	—	—	—	SCS
	do.	do.	do.	—	—	Apr.	1965	6	2/—	—	38	2/.47	2/389	
	do.	do.	do.	—	—	Sept.	1970	5.26	752.4	2.05	*60	.53	734	

SABINE, NECHES, AND TRINITY RIVER BASINS

51-1	Terrell City Lake	Kings Creek	Terrell, Tex.	9.20	8.71	Oct.	1921	—	2,219	—	—	—	—	SCS
	do.	do.	do.	—	—	Dec.	1949	28.25	1,605	—	59.2	2.49	3,211	
51-2	Lower Beaton Lake	Trib. of Elm Creek	Corsicana, Tex.	.91	.82	—	1895*	—	319	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1949	54	205	—	—	2.97	—	
51-3	Burke Rock Lake	do.	do.	.58	.54	—	1880	—	181	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1949	69	92	—	—	2.39	—	
51-4	Lake Dallas	Elm Fk. of Trinity River	Denton, Tex.	1,174	1,157	Feb.	1928	—	180,759	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1952	10.5	167,072	—	53	1.13	1,304	
51-5	Lake Halbert	Elm Creek	Corsicana, Tex.	3/9.48	8.56	—	1921	—	8,012	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1949	28	6,697	—	67.4	5.66	8,308	
51-6	Magnolia Lake (Red Horse)	Trib. of Elm Creek	do.	.59	.43	—	1885	—	736	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1949	64	659	—	—	3.53	—	
51-7	Mountain Creek	Mountain Creek	Dallas, Tex.	280	274.6	Mar.	1937	—	37,520	—	—	—	—	SCS
	do.	do.	do.	—	—	Nov.	1946	9.7	27,100	—	—	3.91	—	
51-8b	White Rock Lake	White Rock Creek	do.	99.1	97.4	Apr.	1910	—	18,158	.80	—	—	—	SCS
	do.	do.	do.	—	—	Apr.	1935	25	14,276	.63	49	1.60	1,708	
	do.	do.	do.	—	—	Mar.	1956	20.9	12,321	.54	35	.97	151	
	do.	do.	do.	—	—	Oct.	1970	14.6	10,743	.47	32	1.11	505	
51-9	Grand Saline	Simmons Branch	Grand Saline, Tex.	2.12	2.02	Feb.	1925	—	531	—	—	—	—	SCS
	do.	do.	do.	—	—	Apr.	1938	13.25	509	—	38.7	.82	651	
51-10	T & P	Town Creek	Weatherford, Tex.	6.24	6.18	—	1930	—	370	—	—	—	—	SCS
	do.	do.	do.	—	—	Nov.	1938	8.5	328	—	61	.796	1,050	
51-11	Lake Clark	Waxahachie Creek	Ennis, Tex.	3.14	2.87	—	4/	—	5/2,085	—	—	—	—	SCS
	do.	do.	do.	—	—	Dec.	1950	—	5/1,761	—	*50	5/2.60	2,031	
51-12	Kemp City	Cedar Creek	Kemp, Tex.	1.48	1.42	June	1926	—	376	—	—	—	—	SCS
	do.	do.	do.	—	—	Apr.	1939	12.8	298	—	—	4.29	—	
51-13	Variety Club Boys' Ranch Lake	Unnamed trib.	Bedford, Tex.	.30	.29	June	1962	—	38	—	—	—	—	SCS
	do.	do.	do.	—	—	Apr.	1970	7.8	33	—	—	2.2	—	
51-14	Wills Point	Magbee Creek	Wills Point, Tex.	1.83	1.75	Sept.	1914	—	396	—	—	—	—	SCS
	do.	do.	do.	—	—	Apr.	1938	23.6	275	—	60.3	2.95	3,835	
51-15	Bridgeport	West Fork of Trinity River	Bridgeport, Tex.	1,052	1,033	—	1932	—	6/292,000	—	—	—	—	SCS
	do.	do.	do.	—	—	Feb.	1963	10.8	283,260	—	—	.785	—	
51-16a	Eagle Mountain	do.	Fort Worth, Tex.	1,875	7/809	Mar.	1934	—	6/211,000	—	—	—	—	SCS
	do.	do.	do.	—	—	Mar.	1939	5	205,175	—	—	1.44	—	
	do.	do.	do.	—	—	Nov.	1952	13	182,030	—	—	2.20	—	
51-17	Lake Erie	Unnamed trib.	do.	1.05	1.02	—	1899	—	270	—	—	—	—	SCS
	do.	do.	do.	—	—	Apr.	1939	40	204	—	—	1.43	—	
51-18	Mabank City Lake	Trib. of Cedar Creek	Athens, Tex.	.36	.33	—	1926	—	295	—	—	—	—	SCS
	do.	do.	do.	—	—	Apr.	1939	13	271	—	—	5.51	—	
51-19	Wolf Creek	Wolf Creek	Palestine, Tex.	2.55	2.50	—	1919	—	222	—	—	—	—	SCS
	do.	do.	do.	—	—	Apr.	1939	20	199	—	—	.46	—	
51-20	Elkins Lake	East Sandy Creek	Huntsville, Tex.	3.18	3.05	—	1930	—	856	—	—	—	—	SCS
	do.	do.	do.	—	—	July	1950	20	612	—	—	.72	—	

1/ Sediment pool only.
2/ Area above sediment pool riser was not surveyed in 1965.
3/ Excludes area above two lakes in watershed which contributes occasional flow to Lake Halbert.
4/ Lake Clark was built in 1940 downstream from "Ennis New Lake" or "Club Lake" which was built in 1895. Club Lake and a small pond now submerged by Lake Clark.
5/ Data based upon combined capacities, drainage area, and sediment volumes of all lakes in system.
6/ Water supply pool capacity. Does not include surcharge or flood storage.
7/ Excludes area above Bridgeport Reservoir which lies upstream from Eagle Mt. Reservoir.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
			SABINE, NECHES, AND TRINITY RIVER BASINS (Continued)										
51-21	Murphy Lake	East Fork of Trinity River	Crandall, Tex.	4.09	3.98	Oct. 1922	—	397	—	—	—	—	SCS
	do	do	do	—	—	Apr. 1939	16.5	138	—	*60	3.94	5,150	
51-22	Loring Lake	Trib. of Harrison Creek	Zwolle, La.	1.05	.95	Sept. 1928	—	663	.789	—	—	—	SCS
	do	do	do	—	—	Sept. 1954	26	623	.742	85.08	1.62	3,002	
51-23	Kerens City Lake	Cow Creek	Kerens, Tex.	6.42	6.28	Sept. 1935	—	690	.237	—	—	—	SCS
	do	do	do	—	—	July 1954	18.8	554	.208	54.49	.64	759	
51-24	Variety Club Lake	Trib. of Trinity River	Bedford, Tex.	.29	.29	July 1962	—	38	*.491	—	—	—	SCS
	do	do	do	—	—	May 1970	7.8	33	*.426	—	2.21	—	
51-25a	Clear Fk. Watershed Site No. 10.	Trinity River	Weatherford, Tex.	4.30	4.25	Oct. 1955	—	1,473.49	1.90	—	—	—	SCS
	do	do	do	—	—	Apr. 1963	7.5	1,430.91	1.84	—	—	—	
	do	do	do	—	—	May 1968	5.1	1,411.06	1.82	86	.92	1,662	
51-26b	Honey Creek Site No. 11	Honey Creek	McKinney, Tex.	1.99	1.92	Feb. 1952	—	1,291.0	1.89	—	—	—	SCS
	do	do	do	—	—	Apr. 1962	10.2	1,201.8	1.76	—	—	—	
	do	do	do	—	—	July 1967	5.3	1,186.7	1.74	51.9	1.48	3,956	
51-27b	Honey Creek Site No. 12	Trib. E. Fork Trinity	do	1.28	1.26	Jan. 1952	—	553.33	1.27	—	—	—	SCS
	do	do	do	—	—	July 1969	17.5	475.52	1.09	40.72	3.53	3,130	
51-28a	Dawson City Lake	Trib. of Richland Creek	Dawson, Tex.	1.16	1.07	Apr. 1937	—	610	1.473	—	—	—	SCS
	do	do	do	—	—	Feb. 1956	18.8	466	1.126	—	7.16	5,130	
	do	do	do	—	—	Sept. 1963	7.5	390.1	.942	..	9.46	6,387	
51-29	Lake Cherokee	Sabine River	Longview, Tex.	170.00	163.77	Oct. 1948	—	49,295	.426	—	—	—	SCS
	do	do	do	—	—	Apr. 1960	11.5	46,705	.412	83.12	1.37	2,480	
51-30	Lavon Reservoir	East Fork Trinity River	Lavon, Tex.	777.0	745.7	— 1945 1/	—	423,400	1.329	—	—	—	CE
	do	do	do	—	—	Oct. 1953 2/	0	434,450	1.363	—	—	—	
	do	do	do	—	—	Oct. 1959	6.0	425,960	1.337	53.1	1.90	2,197	
51-31a	Site No. 11B Elm Fk. Watershed	Trinity River	Gainesville, Tex.	2.00	1.87	Nov. 1958	—	678.2	1.33	—	—	—	SCS
	do	do	do	—	—	July 1963	4.67	670.0	1.31	3/78.3	.96	3/1,637	
	do	do	do	—	—	Oct. 1968	5.25	654.6	1.28	87	1.57	2,402	
51-32	Garza-Little Elm Reservoir (Lewisville Dam).	Elm Fork of Trinity River	Lewisville, Tex.	1,660	1,599	— 1946	—	1,016,200	2.311	—	—	—	CE
	do	do	do	—	—	— 1952 4/	—	1,002,900	2.281	—	—	—	
	do	do	do	—	—	Nov. 1954 5/	—	1,003,400	2.282	—	—	—	
	do	do	do	—	—	Sept. 1960	5.88	989,728	2.251	50.6	1.46	1,609	
51-33	Dam B Reservoir	Neches	Jasper, Tex.	6/7,573	7,546.6	— 1947	—	126,700	.032	—	—	—	CE
	do	do	do	—	—	— 1951	—	7/131,142	.034	—	—	—	
	do	do	do	—	—	Feb. 1960	8.83	131,681	.034	60.9	8/.025	8/33.16	
51-34	Clear Creek Watershed Site No. 21.	Trinity River	Muenster, Tex.	1.56	1.46	May 1962	—	479.6	1.37	—	—	—	SCS
	do	do	do	—	—	Aug. 1967	5.19	468.8	1.34	—	1.40	—	
51-35	Upper Lake Fk. Watershed Site 23	Sabine River	Sulphur Springs, Tex.	9.39	8.80	Aug. 1962	—	3,303.5	.69	—	—	—	SCS
	do	do	do	—	—	Oct. 1967	5.2	3,282.9	.69	—	.45	652	
51-36	Lake Amon G. Carter	Big Sandy Creek	Bowie, Tex.	103	101	May 1956	—	15,805.75	1.07	—	—	—	SCS
	do	do	do	—	—	May 1967	11	15,238.06	1.03	55.19	.51	613	
51-37	Chambers Creek Site 37	Trinity River	Cleburne, Tex.	2.05	1.95	Dec. 1960	—	624.84	1.34	—	—	—	SCS
	do	do	do	—	—	Sept. 1964	3.8	619.37	1.33	—	—	—	
	do	do	do	—	—	May 1969	4.7	617.89	1.33	49	.16	168	
51-38	Chambers Creek Site 101-A	do	Frost, Tex.	2.58	2.34	Apr. 1960	—	1,152.11	1.20	—	—	—	SCS
	do	do	do	—	—	Oct. 1964	4.5	1,137.61	1.18	—	—	—	
	do	do	do	—	—	Sept. 1968	3.9	1,114.89	1.16	54.9	2.49	2,806	
51-39	Clear Fork Watershed Site No. 7.	do	Poolville, Tex.	2.55	2.44	Oct. 1955	—	746.9	1.57	—	—	—	SCS
	do	do	do	—	—	Apr. 1969	13.5	626.29	1.32	47.2	3.66	3,760	
51-40	Denton Creek Watershed Site No. 17.	do	Decatur, Tex.	4.10	3.94	Oct. 1963	—	1,621.33	2.7	—	—	—	SCS
	do	do	do	—	—	Oct. 1968	5	1,557.16	2.6	—	3.26	—	
51-41	East Keechi Creek Site No. 1	Brazos River	Jacksboro, Tex.	6.63	6.30	Jan. 1964	—	1,845.56	1.76	—	—	—	SCS
	do	do	do	—	—	June 1968	4.4	1,827.15	1.74	*72	.66	1,035	
			LOWER BRAZOS, LOWER COLORADO, GUADALUPE, SAN ANTONIO, AND NUECES RIVER BASINS										
52-1	Lake Corpus Christi	Nueces River	Mathis, Tex.	16,800	16,791	July 1934	—	54,426	.080	—	—	—	SCS
	do	do	do	—	—	Mar. 1942	7.6	43,801	.064	34.9	.083	63	
	do	do	do	—	—	Mar. 1948	6.0	39,387	.058	35.6	.044	36	
52-2	Medina Lake	Medina River	San Antonio, Tex.	587	578	Mar. 1913	—	274,065	—	—	—	—	SCS
	do	do	do	—	—	Jan. 1937	23.9	267,630	—	61.1	.465	619	
	do	do	do	—	—	May 1948	11.3	265,075	—	75.0	.391	—	

52-3	Buchanan	Colorado River	Burnet, Tex.	9/19,350	19,313	June	1937	—	970,010	*.649	—	—	—	SCS
	do	do	do	—	—	Feb.	1941	3.7	954,859	*.639	—	.21	—	
52-4	Moss Ranch Stock Pond	S. Bull Creek	Llano, Tex.	.07	.07	—	1909	—	4.7	—	—	—	—	SCS
	do	do	do	—	—	Feb.	1941	32	4.5	—	—	.07	—	
52-5	Moss Ranch Stock Pond	W. Bull Creek	do	.20	.19	—	1903	—	9.3	—	—	—	—	SCS
	do	do	do	—	—	Feb.	1941	38	9.1	—	—	.021	—	
52-6	Helms Tank	Trib. of Sandy Creek	do	.15	.14	—	1916	—	12	—	—	—	—	SCS
	do	do	do	—	—	Feb.	1941	25	11.6	—	—	.12	—	
52-7	Baker Lake	Trib. of San Antonio River	Somerset, Tex.	3.17	3.10	Sept.	1950	—	251	.595	—	—	—	SCS
	do	do	do	—	—	Aug.	1955	4.95	228	.540	34.63	1.50	1,132	
52-8a	Calaveras Creek Site No. 6	Calaveras Creek	San Antonio, Tex.	7.01	6.70	Dec.	1956	—	1,697.82	1.65	—	—	—	SCS
	do	do	do	—	—	Mar.	1968	11.25	1,661.12	1.62	66.17	.49	706	
52-9	Escondido No. 11	Trib. of Escondido Creek	Kenedy, Tex.	8.43	7.94	July	1958	—	2,728.0	2.022	—	—	—	SCS
	do	do	do	—	—	July	1960	2.0	2,667.8	1.970	47.08	3.79	3,886	
52-10	Rudder Pond	Trib. of Llano River	Hunt, Tex.	1.35	1.34	Aug.	1951	—	11.96	.081	—	—	—	SCS
	do	do	do	—	—	Aug.	1955	4	11.45	.078	—	.09	—	
52-11	Sirianni Lake	Trib. of Hondo Creek	Moore, Tex.	.769	.747	Feb.	1951	—	80.3	1.999	—	—	—	SCS
	do	do	do	—	—	Sept.	1955	4.54	76.5	1.866	45.6	1.12	1,112	
52-12	Smith Pond	Trib. of Bonito Creek	Jourdanton, Tex.	.191	.188	Apr.	1953	—	6.61	.361	—	—	—	SCS
	do	do	do	—	—	Aug.	1955	2.4	5.60	.315	27.8	1.80	1,090	
52-13	Thornton Lake	Cibolo Creek	Boerne, Tex.	1.56	1.52	Sept.	1952	—	142.6	.778	—	—	—	SCS
	do	do	do	—	—	Aug.	1955	2.92	135.2	.549	—	1.64	—	
52-14	Ilay Lake	Guadalupe River	Gonzales, Tex.	2.34	2.32	Jan.	1949	—	10/46.97	.078	—	—	—	SCS
	do	do	do	—	—	June	1964	15.42	43.75	.070	28.3	.15	98	
52-15	Blackwell Lake	Trib. of Bear Creek Guadalupe River Basin.	Cuero, Tex.	2.76	2.75	Sept.	1949	—	10/45.12	.061	—	—	—	SCS
	do	do	do	—	—	June	1964	14.75	41.51	.036	49.6	.09	97	
52-16a	Site No. 1 Escondido Creek	San Antonio River	Kenedy, Tex.	3.02	2.83	Sept.	1956	—	924.7	2.30	—	—	—	SCS
	do	do	do	—	—	June	1964	9.8	906.2	2.26	—	.07	3/763	
	do	do	do	—	—	July	1969	5.1	890.1	2.22	—	1.12	1,710	
52-17	Cummings Creek Watershed Site No. 6.	Trib. Cummings Creek	Giddings, Tex.	2.99	2.76	Aug.	1958	—	858.3	.77	—	—	—	SCS
	do	do	do	—	—	Sept.	1963	5.1	855.2	.77	—	.22	—	
	do	do	do	—	—	Aug.	1969	5.9	854.1	.76	—	.07	—	
			BRAZOS RIVER BASIN (SOUTH BEND TO WASHINGTON) MIDDLE, AND COLORADO RIVER BASINS											
53-1	Lake Scarborough	Trib. of Jim Ned Creek	Coleman, Tex.	10.8	10.6	May	1925	—	2,153	—	—	—	—	SCS
	do	do	do	—	—	May	1940	17	2,037	—	51.41	.81	907	
53-2	Santa Anna Lake	Mud Creek	Santa Anna, Tex.	1.17	1.05	May	1923	—	766	—	—	—	—	SCS
	do	do	do	—	—	Apr.	1940	17	745	—	45.8	1.18	1,162	
53-3	Lake Eanes	Mercer Creek	Comanche, Tex.	13.76	13.57	May	1926	—	1,313	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1946	20.3	1,221	—	—	.334	—	
53-4	Lake Merritt	Browns Creek	Goldthwaite, Tex.	11.65	11.50	May	1917	—	962	—	—	—	—	SCS
	do	do	do	—	—	May	1940	23	855	—	43	.40	375	
53-5	Hubbard City Lake No. 3	Trib. of E. Cottonwood Cr.	Hubbard, Tex.	.16	.14	—	1913	—	11/104.5	—	—	—	—	SCS
	do	do	do	—	—	May	1949	36	90.2	—	—	2.86	—	
53-6	Hubbard City Lake No. 4	E. Cottonwood Creek	do	1.40	1.35	—	1917	—	11/318.2	—	—	—	—	SCS
	do	do	do	—	—	May	1949	32	255.4	—	—	1.45	—	
53-7a	Rogers Lake	Trib. of Little River	Rogers, Tex.	.55	.51	Fall	1922	—	164	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1934	12	126.5	—	—	6.12	—	
53-8	Hubbard City Lake No. 1	Trib. E. Cottonwood Creek	Hubbard, Tex.	.5	.5	—	1898	—	12/110	—	—	—	—	SCS
	do	do	do	—	—	May	1949	51	84	—	—	1.0	—	
53-9	Hubbard City Lake No. 2	do	do	.03	.03	—	1912	—	12/36.3	—	—	—	—	SCS
	do	do	do	—	—	May	1949	37	33.0	—	—	3.0	—	
53-10	Hubbard City Lake No. 5	East Cottonwood Creek	do	.11	.10	—	1925	—	46.8	—	—	—	—	SCS
	do	do	do	—	—	May	1949	24	37.8	—	—	3.0	—	
53-11	Lake Leon	Redbank Creek	Leon, Tex.	15.0	12.8	—	1911	—	530	—	—	—	—	SCS
	do	do	do	—	—	Mar.	1941	30	354	—	—	.46	—	
53-12	Lometa	Salt & Henry Creeks	Lometa, Tex.	4.76	4.60	—	1912	—	759	—	—	—	—	SCS
	do	do	do	—	—	Feb.	1941	29	732	—	—	.20	—	
53-13	Meridian Lake	Bee Creek	Meridian, Tex.	3.30	3.20	—	1934	—	723	—	—	—	—	SCS
	do	do	do	—	—	Apr.	1948	14	692	—	—	.69	—	
53-14	Miller Lake	Trib. of Horse Creek	San Saba, Tex.	.41	.38	Sept.	1913	—	83	—	—	—	—	SCS
	do	do	do	—	—	Mar.	1941	27.5	75	—	—	.71	—	
53-15	Odell Lake	Unnamed trib.	Hubbard, Tex.	.56	.55	July	1925	—	75.1	—	—	—	—	SCS
	do	do	do	—	—	July	1949	24	52.6	—	—	1.71	—	
53-16	Possum Kingdom Lake	Brazos River	Graford, Tex.	13/14,098	12,955	May	1941	—	729,985	—	—	—	—	SCS
	do	do	do	—	—	Feb.	1969	7.75	672,420	—	—	.97	—	
53-17	Rock Crusher	Bachelor Creek	Coleman, Tex.	16.5	16.48	—	1910	—	153	—	—	—	—	SCS
	do	do	do	—	—	Feb.	1941	31	80	—	—	.14	—	
53-18	Old Santa Anna City Lake	Mukewater Creek	Santa Anna, Tex.	.90	.87	Jan.	1910	—	153	—	—	—	—	SCS
	do	do	do	—	—	June	1940	30.5	118	—	—	1.31	—	

1/ Original capacity from map by stereo photogrammetric methods.

2/ "Original" or 1945 capacity adjusted in 1961 by range line controls established in 1953 give "Oct. 53" area and capacity.

3/ Sediment pool only.

4/ Adjusted for 1952 survey of Lake Dallas.

5/ Adjusted in Apr. 1963 for detailed range survey in 1952-53-54.

6/ Determined by USGS Nov. 1961.

7/ 1951 adjusted data.

8/ Deposits above Highway 190 bridge only. Not corrected for degradation between highway and dam.

9/ Drainage area is 31,250 sq. mi., of which 11,900 sq. mi. are noncontributing.

10/ Original capacity determined by spadding on 1964 survey.

11/ Dam was raised in 1925 and 1949. Capacities based on 1949 level.

12/ Dam was raised in 1925. Capacity based on 1925 level.

13/ Includes 1,111 sq. mi. of partially contributing drainage above lakes in watershed; excludes 8,900 sq. mi. of noncontributing drainage at head of watershed.

* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	BRAZOS RIVER BASIN (SOUTH BEND TO WASHINGTON) MIDDLE, AND COLORADO RIVER BASINS (Continued)												
53-19	Old Coleman City Lake	Home Creek	Coleman, Tex.	0.73	0.69	Nov. 1906	—	289	—	—	—	—	SCS
	do	do	do	—	—	May 1940	33.6	273	—	—	0.67	—	
53-20	Hamilton City Lake	Two Mile Creek	Hamilton, Tex.	12.0	11.9	June 1923	—	610	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1941	17.75	560	—	—	.26	—	
53-21	Lake Leon	Leon River	Eastland, Tex.	225	224.7	June 1920	—	1/1,637	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1941	20.75	1,275	—	—	.08	—	
53-22	Lake Mineral Wells	Rock Creek	Mineral Wells, Tex.	74.4	73.4	— 1922	—	10,763	—	—	—	—	SCS
	do	do	do	—	—	Dec. 1941	19.5	9,032	—	—	1.19	—	
53-23	Buffalo Tank (Knox Tank)	Trib. of Pecan Bayou	Coleman, Tex.	1.73	1.71	— 1900	—	33	—	—	—	—	SCS
	do	do	do	—	—	Feb. 1941	41	29	—	—	.058	—	
53-24	R. G. Hollingsworth Stock Pond.	do	do	2.60	2.58	June 1937	—	20	—	—	—	—	SCS
	do	do	do	—	—	Feb. 1941	3.7	16	—	—	.66	—	
53-25	J. S. Wall Stock Pond	Trib. of Brady Creek	Brady, Tex.	.35	.35	— 1927	—	13	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1941	14	12.2	—	—	.16	—	
53-26	White Tank	Trib. of Pecan Bayou	Brownwood, Tex.	.80	.80	May 1936	—	4.5	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1941	4.8	3.6	—	—	.24	—	
53-27	Zimmerlee Stock Pond (North)	Trib. of Jim Ned Creek	Lawn, Tex.	.13	.13	— 1916	—	1.12	—	—	—	—	SCS
	do	do	do	—	—	Feb. 1941	25	.80	—	—	.10	—	
53-28	Smith Lake	Redbank Creek	do	1.04	1.01	Aug. 1926	—	102	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1941	14.6	93	—	—	.63	—	
53-29	Philpose Lake	Paint Creek	Pioneer, Tex.	9.04	9.00	Apr. 1925	—	183	—	—	—	—	SCS
	do	do	do	—	—	Feb. 1941	15.9	173	—	—	.07	—	
53-30b	Lake Brownwood	Pecan Bayou (Colo. River)	Brownwood, Tex.	1,544	1,533	July 1932	—	149,925	1.011	—	—	—	SCS
	do	do	do	—	—	Feb. 1940	7.6	145,720	.983	41.9	.361	379	
	do	do	do	—	—	Sept. 1959	19.6	135,963	.917	42.2	.325	299	
53-31a	Lake Waco (Old)	Bosque	Waco, Tex.	2/1,649	2/1,645	Apr. 1930	—	39,378	—	—	—	—	CE
	do	do	do	—	—	Feb. 1935	4.9	33,717	—	*58.5	.695	886	
	do	do	do	—	—	Feb. 1936	1.0	31,988	—	*58.5	1.28	1,631	
	do	do	do	—	—	Dec. 1947	11.8	22,026	—	*58.5	.487	621	
	do	do	do	—	—	Dec. 1964	17.0	15,427	—	—	.236	—	
53-32	Lake Eddleman	Flint Creek	Graham, Tex.	42	41.4	Feb. 1929	—	6,583	1.244	—	—	—	SCS
	do	do	do	—	—	May 1954	25.25	5,917	1.028	49.2	.64	687	
53-33b	Site No. 3 Cow Bayou	Brazos	Moody, Tex.	1.40	1.32	Nov. 1955	—	458.5	1.23	—	—	—	SCS
	do	do	do	—	—	Aug. 1960	4.75	393.3	1.05	—	10.40	—	
	do	do	do	—	—	Aug. 1965	5.04	375.4	1.00	—	2.69	—	
	do	do	do	—	—	Apr. 1970	4.69	366.7	.98	—	1.42	1,572	
53-34a	Cow Bayou No. 4	Foster Creek	Waco, Tex.	5.25	5.20	July 1956	—	1,915	1.24	—	—	—	SCS
	do	do	do	—	—	Sept. 1969	13.2	1,833.53	1.19	—	1.19	1,419	
53-35	Deep Creek No. 3	Trib. of Deep Creek	Brady, Tex.	3.42	3.19	Nov. 1953	—	925.18	2.821	—	—	—	SCS
	do	do	do	—	—	Aug. 1960	6.8	881.80	2.688	76.57	2.00	3,335	
53-36a	Green Creek No. 1	Green Creek	Dublin, Tex.	3.57	3.38	Apr. 1955	—	1,095	1.98	—	—	—	SCS
	do	do	do	—	—	Jan. 1957	1.8	1,080	1.96	—	—	—	
	do	do	do	—	—	Apr. 1962	5.2	1,065	1.93	—	—	—	
	do	do	do	—	—	June 1967	5.2	1,063	1.93	73.6	.11	2/88	
53-37	Silver Lake	N. E. Trib. of Leon River	do	.37	.334	— 1910	—	153.8	2.435	—	—	—	SCS
	do	do	do	—	—	July 1960	50	145.0	2.296	—	.527	—	
53-38	Main Res. Deep Creek Site 5	Colorado	Brady, Tex.	2.91	2.72	Aug. 1953	—	1,326.7	4.755	—	—	—	SCS
	do	do	do	—	—	July 1961	7.9	1,295.7	4.644	—	1.44	—	
53-39	Upper Res. Deep Creek Site 5	do	do	2.19	2.18	Aug. 1953	—	15.2	.072	—	—	—	SCS
	do	do	do	—	—	July 1961	7.9	11.2	.053	49.9	.23	250	
53-40a	Mukewater Creek Site No. 9	Mid. Colorado River	Bangs, Tex.	4.75	4.55	Jan. 1961	—	732.96	1.38	—	—	—	SCS
	do	do	do	—	—	June 1965	4.42	708.42	1.33	—	1.22	—	
	do	do	do	—	—	July 1970	5.1	703.41	1.32	—	.22	—	
53-41a	Sulphur Creek Site 3	Lampasas River	Lampasas, Tex.	10.61	10.58	Dec. 1959	—	3,229.2	1.6	—	—	—	SCS
	do	do	do	—	—	Nov. 1962	2.8	3,224.7	1.6	—	—	—	
	do	do	do	—	—	Aug. 1968	5.8	3,223.3	1.6	55	3/.02	3/24	
53-42	Whitney Reservoir	Brazos River	Whitney, Tex.	4/17,656	5/3,480	Dec. 1951	—	6/2,013,600	—	—	—	—	CE
	do	do	do	—	—	Apr. 1959	7.4	1,999,500	—	62.6	.55	749.88	
53-43	Site No. 8 Deep Creek	Dry Prong	Brady, Tex.	4.26	4.02	Dec. 1951	—	1,409.41	2.70	—	—	—	SCS
	do	do	do	—	—	Sept. 1966	14.8	1,367.81	2.62	—	.71	—	
53-44	Site No. 10-A Mukewater Creek	Mukewater Creek	Bangs, Tex.	15.26	14.59	Mar. 1965	—	3,164.09	1.85	—	—	—	SCS
	do	do	do	—	—	Aug. 1966	1.4	3,157.99	1.85	—	.34	—	
53-45	Lake Daniel	Gonzales Creek	Breckenridge, Tex.	115	113	June 1949	—	10,731	.81	—	—	—	SCS
	do	do	do	—	—	Nov. 1970	21.4	9,515	.72	68	.49	512	
53-46	Site 9 Lower San Saba River	Colorado River	San Saba, Tex.	3.03	2.88	Jan. 1960	—	665.79	1.60	—	—	—	SCS
	do	do	do	—	—	Sept. 1967	7.67	635.49	1.57	—	.46	723	

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UPPER BRAZOS AND UPPER COLORADO RIVER BASINS

54-1	Lake Abilene	Elm Creek	Abilene, Tex.	98.5	97.5	Aug. 1921	—	10,325	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1946	27	9,786	—	960	.21	276	
54-2b	Lake Nasworthy	South Concho	San Angelo, Tex.	3,294	3,119	Oct. 1930	—	11,485	*.046	—	—	—	SCS
	do	do	do	—	—	Dec. 1938	8.2	10,294	*.061	67.5	.046	68	
	do	do	do	—	—	May 1953	14.5	7/12,628	*.051	67.5	.023	34	
54-3	Lake Sweetwater	Bitter Creek	Sweetwater, Tex.	110	108.8	Feb. 1930	—	13,810	—	—	—	—	SCS
	do	do	do	—	—	Dec. 1941	11.8	13,287	—	—	.41	—	
54-4	Lake Kirby	Cedar Creek	Abilene, Tex.	44	42.8	Sept. 1928	—	8,133	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1941	13.2	7,618	—	—	.91	—	
54-5	Lake Throckmorton	South Elm River	Throckmorton, Tex.	11.54	11.32	Sept. 1918	—	8/1,967	1.534	—	—	—	SCS
	do	do	do	—	—	June 1954	35.7	1,829	1.441	31.55	.29	199	
54-6a	Lake Fort Phantom Hill	Elm Fork, Brazos River	Abilene, Tex.	478	268	Oct. 1938 9/	—	76,966	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1953	14.8	74,312	—	35.99	.67	525	
54-7	Mountain Creek	Mountain Creek	Robert Lee, Tex.	32.00	31.88	May 1950	—	965.3	.369	—	—	—	SCS
	do	do	do	—	—	Apr. 1961	10.9	804.9	.314	53.06	.40	462.17	
54-8	XXC Ranch Pond	Trib. of S. Concho River	San Angelo, Tex.	1.60	1.53	May 1937	—	276	2.260	—	—	—	SCS
	do	do	do	—	—	Aug. 1955	18.2	250	2.029	63.6	.93	1,288	
54-9	Lake Stamford	Paint Creek	Stamford, Tex.	360	352.34	June 1953	—	57,632.35	1.71	—	—	—	SCS
	do	do	do	—	—	May 1966	12.9	53,927.57	1.60	62.56	.82	760	
54-10	Site 18 Valley Cr. Watershed	Trib. Valley Creek	Winters, Tex.	4.21	4.11	Aug. 1964	—	719.89	2.38	—	—	—	SCS
	do	do	do	—	—	June 1969	4.8	717.05	2.36	69	.14	210	
54-11	Lake Ballinger	Valley Creek	Ballinger, Tex.	210	209	Nov. 1947	—	3,872.09	.28	—	—	—	SCS
	do	do	do	—	—	Aug. 1970	22.8	3,070.42	.22	37	.17	137	
54-12	Lake Winters	Elm Creek	Winters, Tex.	63.62	63.14	Oct. 1945	—	2,518.2	.59	—	—	—	SCS
	do	do	do	—	—	July 1970	24.75	1,886.2	.44	39	.40	340	

RIO GRANDE BASIN (BELOW EAGLE PASS)

55-1	Site 6 Olmitos & Garcias Creeks	El Gato Creek	Rio Grande City, Tex.	13.19	12.96	June 1962	—	2,258.11	21.5	—	—	—	SCS
	do	do	do	—	—	Sept. 1966	4.25	2,252.03	21.4	9/75	.11	179.69	

RIO GRANDE BASIN (FORT QUITMAN TO EAGLE PASS) AND LOWER PECOS RIVER BASIN

56-1a	Cottonwood Detention	San Felipe Arroyo River	Fabens, Tex.	2.34	2.19	July 1937	—	500	16.129	—	—	—	SCS
	do	do	do	—	—	July 1954	17	378	12.154	—	3.28	—	
56-2	Rattlesnake Detention	do	do	5.15	10/2.81	July 1937	—	224.4	—	—	—	—	SCS
	do	do	do	—	—	July 1954	17	175.7	—	—	1.02	—	
56-3	Roberts Detention	do	do	2.36	2.31	July 1937	—	145.3	4.687	—	—	—	SCS
	do	do	do	—	—	July 1954	17	104.8	3.381	—	1.05	—	
56-4a	Fresno Pond	Trib. of Devils River	Sonora, Tex.	.435	.430	Dec. 1944	—	7.31	.222	—	—	—	SCS
	do	do	do	—	—	Aug. 1955	10.75	6.97	.211	69.6	.074	112	
56-5	Lowrey Draw, Site No. 9	Lowrey Draw	do	2.77	2.64	June 1961	—	3/31.1	.49	—	—	—	ARS
	do	do	do	—	—	Feb. 1969	7.65	30.84	.48	64	.01	17.5	
56-6	Lowrey Draw, Site No. 10	Trib. Lowrey Draw	do	8.43	8.20	June 1961	—	3/95	.68	—	—	—	ARS
	do	do	do	—	—	Mar. 1969	7.83	94.38	.68	64	.01	13.5	
56-7	Lowrey Draw, Site No. 12	do	do	4.38	4.19	June 1961	—	3/85.46	.68	—	—	—	ARS
	do	do	do	—	—	Feb. 1969	7.65	84.03	.67	64	.04	62.2	
56-8	Lowrey Draw, Site No. 13	do	do	1.07	1.02	June 1961	—	3/56.26	3.28	—	—	—	ARS
	do	do	do	—	—	Mar. 1969	7.74	56.10	3.26	64	.02	28.2	
56-9	Site No. 1 Diablo Arroyo	Rio Grande	McNary, Tex.	29.09	29.51	Apr. 1960	—	4,489.7	11.3	—	—	—	SCS
	do	do	do	—	—	Apr. 1965	5	4,343.1	10.9	—	—	—	
	do	do	do	—	—	Apr. 1970	5	4,235.1	10.6	—	.86	1,129.5	

1/ Dam was raised 1 ft. in 1938. Capacity at 1938 spillway level.
2/ Latest drainage area by USGS in 1964.
3/ Sediment pool only.
4/ Does not include 8,900 sq. mi. which is considered to be noncontributing to the total 26,506 sq. mi. drainage area.
5/ For the 3,598 sq. mi. area between Possum Kingdom and Whitney Dams, excluding 77.8 sq. mi. which is reservoir surface area at elevation 573.
6/ Original storage capacity 2,017,500 ac.-ft. Adjusted in 1963 for detailed range survey in 1951.
7/ Spillway raised 2.3 ft. in Sept. 1948.
8/ Dam was raised 13 ft. in 1940; capacity at 1940 spillway elevation.
9/ Date storage began has not been verified.
10/ Includes Hueco Watershed but does not include Roberts Watershed.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
				RIO GRANDE BASIN (ESPANOLA TO FORT QUITMAN)									
57-1b	Elephant Butte	Rio Grande River	Elephant Butte, N. Mex.	25,923	25,866	Jan. 1915	—	2,634,800	—	—	—	—	[illegible]
	do	do	do	—	—	Dec. 1916	1.9	2,584,865	—	—	1.02	—	
	do	do	do	—	—	Aug. 1920	3.7	2,498,030	—	—	.879	—	
	do	do	do	—	—	Aug. 1925	5.0	2,389,380	—	—	.866	—	
	do	do	do	—	—	Apr. 1935	9.7	2,270,300	—	60	.475	621	
	do	do	do	—	—	Oct. 1940	5.5	2,219,080	—	—	.362	—	
	do	do	do	—	—	Apr. 1947	6.5	2,197,660	—	*65.9	.127	182	
	do	do	do	—	—	Feb. 1957	9.75	3/2,206,780	2.20	60.0	—	—	
	do	do	do	—	—	Apr. 1969	12.2	2,137,219	2.31	62	.22	357	
57-2	Caballo	do	Truth or Consequences, N. Mex.	2/30,700	3/1,237	Jan. 1938	—	345,872	—	—	—	—	[illegible]
	do	do	do	—	—	Nov. 1957	19.9	343,990	—	—	.0761	—	
57-3a	Santa Cruz	Santa Cruz River	Espanola, N. Mex.	93.1	93.1	Feb. 1929	—	4,464	.190	—	—	—	[illegible]
	do	do	do	—	—	Aug. 1956	27.6	3,758	.160	80	.27	470	
57-4	Cornfield Wash (1)	Trib. of Rio Puerco River	Cuba, N. Mex.	.29	.28	Apr. 1951	—	26.0	1.446	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	4/10	10.3	.620	—	4.07	—	
57-5	Cornfield Wash (2)	do	do	.87	.85	Apr. 1951	—	56.1	3.127	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	4/10	43.1	2.607	—	1.05	—	
57-6	Cornfield Wash (3)	do	do	.25	.25	Apr. 1951	—	3.9	.711	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	4/10	2.6	.313	—	1.32	—	
57-7	Cornfield Wash (4)	do	do	1.18	1.17	Apr. 1951	—	22.1	1.277	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	4/10	17.4	1.026	—	.40	—	
57-8	Cornfield Wash (5)	do	do	1.04	1.04	Apr. 1951	—	9.2	.474	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	4/10	3.0	.155	—	.60	—	
57-9	Cornfield Wash (9)	do	do	.09	.09	Apr. 1951	—	4.6	.968	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	4/10	3.1	.659	—	1.67	—	
57-10	Cornfield Wash (13)	do	do	.33	.33	Apr. 1951	—	7.4	.561	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	4/10	.3	.025	—	2.15	—	
57-11	Cornfield Wash (15)	do	do	1.04	1.03	Dec. 1953	—	17.9	6.630	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	4/7	17.8	6.595	—	.02	—	
57-12	San Luis (1)	do	do	1.06	1.05	Aug. 1952	—	16.3	.676	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	4/8	12.0	.498	—	.52	—	
57-13	San Luis (3)	do	do	.67	.66	Aug. 1952	—	22.6	.938	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	4/8	19.6	.831	—	.59	—	
57-14	Zia Reservoir	Trib. of Jemez River	San Ysidro, N. Mex.	2.4	2.4	June 1954	—	59.9	2.155	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	4/7	19.0	.683	—	2.43	—	
57-15a	Jemez Canyon Reservoir	Jemez River	Bernalillo, N. Mex.	1,034	1,034	Oct. 1953	—	117,213	2.884	—	—	—	[illegible]
	do	do	do	—	—	Jan. 1958	5/4.25	115,821	2.810	*73.7	.327	523	
	do	do	do	—	—	Aug. 1959	5/1.67	113,876	2.763	*73.7	1.128	1,800	
	do	do	do	—	—	Dec. 1965	5/6.33	112,809	2.737	*73.7	.168	287	
57-16	San Luis #2	Rio Puerco River	Cuba, N. Mex.	.74	.74	July 1952	—	*3.0	.120	—	—	—	[illegible]
	do	do	do	—	—	July 1962	—	—	—	—	.62	—	
57-17	Caballo Arroyos Site 1 (Underwood).	Underwood Arroyo	Derry, N. Mex.	.87	.87	Nov. 1959	—	73.21	15.9	—	—	—	[illegible]
	do	do	do	—	—	Aug. 1967	7.8	68.79	14.9	111	.44	1,547	
57-18	Site #6 (Alamo Arroyo)	Alamo Arroyo	Chimayo, N. Mex.	3.15	3.12	Apr. 1962	—	232	6.9	—	—	—	[illegible]
	do	do	do	—	—	Dec. 1968	6.7	160	4.76	*100	3.30	7,187	
57-19	Site #5 (Ranchos Arroyo)	Ranchos Arroyo	do	1.17	1.16	Sept. 1962	—	111	8.9	—	—	—	[illegible]
	do	do	do	—	—	Jan. 1969	6.3	69	5.5	*110	6.05	14,446	
	do	do	do	—	—	Oct. 1969	.7	37.5	3.0	*110	27.16	108,997	
57-20	North Salem Site #3	North Salem Arroyo	Salem, N. Mex.	3.8	3.8	Apr. 1957	—	206.71	*10.1	—	—	—	[illegible]
	do	do	do	—	—	Aug. 1967	10.25	190.82	*9.4	98.5	.35	750.9	
57-21	Rodey (Hatch Valley Arroyo #5)	Rodey Arroyo	Hatch, N. Mex.	2.1	2.1	July 1958	—	170.91	15.4	—	—	—	[illegible]
	do	do	do	—	—	Aug. 1967	9.1	142.25	12.7	85	1.95	2,889	
				UPPER PECOS RIVER BASIN									
58-1	Bonito	Bonito Creek, Kraut Gulch	Capitan, N. Mex.	40.0	39.9	June 1931	—	1,180	—	—	—	—	[illegible]
	do	do	do	—	—	Sept. 1940	9	1,190	—	—	.023	—	
58-2a	Alamogordo	Pecos River	Ft. Sumner, N. Mex.	4,393	3,749	— 1936	—	156,750	.946	—	—	—	[illegible]
	do	do	do	—	—	Sept. 1940	3.25	146,071	.881	*73.5	.076	1,410	
	do	do	do	—	—	Oct. 1943	3.08	130,280	.785	—	—	—	
	do	do	do	—	—	Apr. 1944	0.50	132,171	.797	*73.5	1.03	1,449	
	do	do	do	—	—	Sept. 1964	20.42	110,655	.668	*73.5	.203	450	
58-3a	Avalon (Lake Avalon)	Pecos River	Carlsbad, N. Mex.	16,030	1,080	Apr. 1927	—	7,600	—	—	—	—	[illegible]
	do	do	do	—	—	Apr. 1942	14.00	6,613	—	—	6/.0063	—	
	do	do	do	—	—	July 1956	15.25	5,447	—	76.7	.0599	—	

58-4a	McMillan (Lake McMillan)	—do—	—do—	14,990	14,990	Jan.	1894	—	91,000	.344	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	June	1904	10.42	73,000	.276	—	.116	—	
	—do—	—do—	—do—	—	—	Nov.	1910	6.42	61,900	.232	—	.120	—	
	—do—	—do—	—do—	—	—	May	1915	4.50	45,500	.172	—	.238	—	
	—do—	—do—	—do—	—	—	June	1925	10.08	42,000	.159	—	.023	—	
	—do—	—do—	—do—	—	—	Dec.	1932	7.50	40,900	.153	—	.013	—	
	—do—	—do—	—do—	—	—	Jan.	1940	7.08	38,655	.146	*70	.027	—	
	—do—	—do—	—do—	—	—	July	1956	16.50	7/39,400	.149	8/62.4	.024	—	
58-5	Upper-Hondo Site #1	Salado Creek	Capitan, N. Mex.	122	93.92	May	1959	—	4,972.14	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	Oct.	1959	.42	4,946.54	—	*75	.65	1,060	
	—do—	—do—	—do—	—	—	May	1961	1.58	4,896.60	—	75	.34	555	
	—do—	—do—	—do—	—	—	Mar.	1962	.83	4,818.00	—	75	1.02	1,449	
	—do—	—do—	—do—	—	—	Feb.	1963	.92	4,796.41	—	75	.25	408	
	—do—	—do—	—do—	—	—	Jan.	1965	1.92	4,749.56	—	75	.38	424	
58-6	Bancroft #7	—do—	—do—	12	12	Feb.	1955	—	4.77	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	Oct.	1965	10.67	3.52	—	*75	.02	16	
58-7	Bancroft #9	—do—	—do—	.57	.57	Feb.	1955	—	7.30	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	Oct.	1965	10.67	1.59	—	*75	.98	1,500	
58-8	Bancroft #11	—do—	—do—	.69	.69	Feb.	1955	—	4.09	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	Oct.	1965	10.67	1.99	—	*75	.34	554	
58-9	Pearson #6	—do—	—do—	.19	.19	Mar.	1955	—	2.21	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	May	1957	2.17	1.60	—	*75	1.46	2,380	
	—do—	—do—	—do—	—	—	Apr.	1959	1.91	1.52	—	*75	.24	391	
	—do—	—do—	—do—	—	—	Oct.	1965	6.50	.49	—	*75	.83	1,352	
58-10	Pearson #8	—do—	—do—	.24	.24	Mar.	1955	—	5.65	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	Dec.	1956	1.75	4.30	—	*75	2.73	4,555	
	—do—	—do—	—do—	—	—	Jan.	1958	1.08	3.62	—	*75	2.63	4,280	
	—do—	—do—	—do—	—	—	Jan.	1959	1.00	3.02	—	*75	2.49	4,130	
	—do—	—do—	—do—	—	—	Oct.	1965	6.75	.55	—	*75	1.53	2,519	
58-11	Pearson #9	—do—	—do—	1.56	1.56	Nov.	1954	—	23.78	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	Oct.	1965	10.92	16.05	—	*75	.45	734	
58-12	Pearson #10	—do—	—do—	.71	.71	Mar.	1955	—	20.19	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	May	1957	2.17	18.04	—	*75	1.39	2,262	
	—do—	—do—	—do—	—	—	Jan.	1958	.67	17.99	—	*75	.14	228	
	—do—	—do—	—do—	—	—	Oct.	1958	.75	17.58	—	*75	.76	1,241	
	—do—	—do—	—do—	—	—	Oct.	1965	7.00	16.05	—	*75	.31	505	
58-13	Pearson #18	—do—	—do—	1.80	1.80	Mar.	1955	—	15.60	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	Oct.	1965	10.67	2.20	—	*75	.70	1,142	
58-14	Pearson #20	—do—	—do—	9/.16	9/.16	Mar.	1955	—	6.55	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	Oct.	1965	10.58	5.77	—	*75	.46	752	

COLORADO RIVER BASIN (BELOW HOOVER DAM)
Williams and Lower Gila River Basins

59-

GILA RIVER BASIN

60-1	Lake Pleasant	Agua Fria River	Phoenix, Ariz.	1,450	1,444	Apr.	1928	—	184,500	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	Feb.	1961	12.9	176,456	—	—	.432	—	
60-2a	San Carlos (Coolidge Dam)	Gila River	Globe, Ariz.	12,900	*11,900	Nov.	1928	—	1,266,837	6.054	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	Feb.	1935	6.3	1,232,725	5.891	—	.455	—	
	—do—	—do—	—do—	—	—	Jan.	1937	1.9	1,230,695	5.882	—	.090	—	
	—do—	—do—	—do—	—	—	Jan.	1947	10.0	1,209,363	5.780	—	.179	—	
	—do—	—do—	—do—	—	—	—	1966	19.6	1,170,118	5.592	—	.168	—	
60-3	Stock Tank No. 16 (Bryce Dam)	Butler Wash	Eden, Ariz.	.69	.69	Mar.	1936	—	11.43	—	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	—	1961	5.2	5.13	—	—	1.75	—	
60-4	Roosevelt-Salt River Project	Salt River & Tonto Creek	Globe, Ariz.	5,760	5,760	May	1909	—	1,522,200	1.886	—	—	—	[illegible]
	—do—	—do—	—do—	—	—	Dec.	1914	5.7	1,495,460	1.853	*70	.819	1,248	
	—do—	—do—	—do—	—	—	Oct.	1916	1.8	1,460,150	1.809	*70	3.350	5,107	
	—do—	—do—	—do—	—	—	Sept.	1925	8.9	1,425,813	1.767	*70	.670	1,021	
	—do—	—do—	—do—	—	—	Jan.	1935	9.3	1,418,013	1.757	*70	.145	221	
	—do—	—do—	—do—	—	—	Jan.	1939	4.0	1,398,430	1.733	*70	.850	1,296	
	—do—	—do—	—do—	—	—	Jan.	1946	7.0	1,381,580	1.712	*70	.418	637	

1/ Total storage shows a gain of 9,180 ac.-ft. since 1947 survey attributable primarily to compaction.

2/ Includes 2,940 sq. mi. in closed basin in San Luis Valley, Colo.

3/ Drainage area between gaging station below Elephant Butte Dam and gaging station below Caballo Dam less original water surface area of Caballo Reservoir at elevation 4,225.3.

4/ Runoff seasons.

5/ Time periods adjusted.

6/ Compacted sediment for 1,080 sq. mi.; values for 16,030 sq. mi. are given in appendix summaries.

7/ Increase in capacity due mainly to compaction.

8/ Only surface samples (1.0-3.1 ft.) in approximately 1/3 of reservoir area below spillway crest.

9/ Drainage area is 100 ac. plus pipe flow from Pearson #11, which has a drainage area of 10 ac., plus pipe and emergency spillway flow from Pearson #18, which has a drainage area of 1.80 sq. mi.

* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
			GILA RIVER BASIN (Continued)										
60-5	Allen	Trib. of Gila River	Thatcher, Ariz.	1/4.17	4.13	— 1936	—	279	2.867	—	—	—	[illegible]
	do	do	do	—	—	June 1958	22	253	2.582	—	0.87	—	
60-6	"D" Mt. Tank No. 1	Whitewater Draw	Douglas, Ariz.	.21	.21	— 1917	—	2.94	.516	—	—	—	[illegible]
	do	do	do	—	—	Nov. 1958	41	2.54	.446	*75	.05	61.7	
60-7	"D" Mt. No. 2	do	do	10.92	10.92	— 1938	—	2.55	.009	—	—	—	[illegible]
	do	do	do	—	—	Nov. 1958	20	.70	.002	*75	.008	13.1	
60-8	"D" Mt. No. 3	do	do	2.48	2.48	Sept. 1957	—	14.7	.218	—	—	—	[illegible]
	do	do	do	—	—	Nov. 1958	2/7	.0	0	*95	.95	1,975	
60-9	"D" Mt. No. 4	do	do	.36	.36	Mar. 1962	—	.43	—	—	—	—	[illegible]
	do	do	do	—	—	Nov. 1958	3/12	.0	—	*90	.10	196	
60-10	"D" Mt. No. 5	do	do	12.3	12.3	— 1963	—	3.0	.039	—	—	—	[illegible]
	do	do	do	—	—	Nov. 1958	3/5	2.7	.038	*75	.006	9.8	
60-11	"D" Mt. Pond No. 6	do	do	5.68	5.68	— 1961	—	.8	.035	—	—	—	[illegible]
	do	do	do	—	—	Nov. 1958	3/6	.6	.026	*75	.016	9.8	
60-12	Dos Cabezas No. 4 & 5B	Trib. of Willcox Dry Lake	Dos Cabezas, Ariz.	.6	.6	— 1949	—	6.0	.312	—	—	—	[illegible]
	do	do	do	—	—	Nov. 1960	11	4.1	.214	*90	.29	559	
60-13a	Dos Cabezas No. 15	do	do	.38	.38	— 1940	—	4.7	.385	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	20	2.8	.230	*90	.26	510	
60-14	Halfmoon	Trib. of Gila River	Florence, Ariz.	.2	.2	— 1941	—	6.8	1.809	—	—	—	[illegible]
	do	do	do	—	—	June 1960	19	3.9	1.083	*95	.73	1,380	
60-15	Homestead	do	do	.9	.9	— 1954	—	6.00	.360	—	—	—	[illegible]
	do	do	do	—	—	June 1960	6	1.83	.112	*90	.78	1,530	
60-16	Lower Posto Wash	Posto Wash	Safford, Ariz.	4.80	3/.63	— 1936	—	14.8	—	—	—	—	[illegible]
	do	do	do	—	—	June 1958	22	13.0	—	—	.13	—	
60-17	Magma No. 1	Magma Wash	Florence, Ariz.	1.78	1.78	— 1948	—	5.7	.176	—	—	—	[illegible]
	do	do	do	—	—	May 1959	11	2.7	.084	*90	.15	282	
60-18	Magma No. 2	do	do	.38	.38	Feb. 1954	—	1.6	.232	—	—	—	[illegible]
	do	do	do	—	—	May 1959	5.4	1.3	.188	*95	.15	298	
60-19a	Magma No. 3	do	do	21.9	*7.0	— 1949	—	6.0	—	—	—	—	[illegible]
	do	do	do	—	—	May 1959	10	3.8	—	*75	.03	49	
60-20	Riggs	Trib. Willcox Dry Lake	Dos Cabezas, Ariz.	.6	.6	— 1946	—	1.9	.099	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1960	14	1.4	.073	*80	.06	105	
60-21	Upper Posto Wash	Posto Wash	Safford, Ariz.	4.95	4.95	— 1936	—	24.2	.209	—	—	—	[illegible]
	do	do	do	—	—	June 1958	22	19.5	.168	—	.04	—	
60-22	Whitlow Old Tank	Trib. of Gila River	Florence, Ariz.	.74	.74	— 1950	—	3.4	.254	—	—	—	[illegible]
	do	do	do	—	—	June 1960	10	1.8	.134	*95	.23	476	
60-23a	Bartlett	Verde	Sunflower, Ariz.	5,812	190	Feb. 1939	—	182,608	—	—	—	—	[illegible]
	do	do	do	—	—	Aug. 1942	3.50	179,480	—	—	4/.154	—	
	do	do	do	—	—	Nov. 1950	8.33	2/179,568	—	—	—	—	
	do	do	do	—	—	Jan. 1964	13.17	178,480	—	—	.426	—	
60-24a	Horseshoe	do	do	5,618	5,614	Nov. 1945	—	67,900	.261	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1950	4.9	8/142,830	.507	—	.044	—	
	do	do	do	—	—	Nov. 1963	13.1	139,238	.494	—	.029	—	
60-25	Posto Wash Pond #3	Trib. of Posto Wash	Safford, Ariz.	.60	.58	— 1936*	—	19.10	*1.705	—	—	—	[illegible]
	do	do	do	—	—	Jan. 1964	*28	17.10	*1.527	76.2	.12	199	
60-26	Posto Wash Pond #4	Trib. of Gila River	do	.33	.33	— 1936*	—	6.462	*1.049	—	—	—	[illegible]
	do	do	do	—	—	Jan. 1964	*28	5.325	*.864	72.6	.12	190	
60-27	Williams-Chandler Pond #1	Trib. of Queen Creek	Florence Junction, Ariz.	1.09	1.09	— 1931	—	2.10	.197	—	—	—	[illegible]
	do	do	do	—	—	July 1961	30	1.00	.094	60	.033	43	
60-28	Williams-Chandler Pond #2	do	do	.65	.65	— 1944	—	9.33	1.366	—	—	—	[illegible]
	do	do	do	—	—	July 1961	17	8.95	1.291	60	.034	44	
60-29	Big Horn Mt. Tank #1	Trib. of Centennial Wash	Tonopah, Ariz.	.51	.51	June 1960	—	21.30	*7.83	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1964	4.3	21.06	*7.74	47.6	.11	114	
60-30	Big Horn Mt. Tank #2	do	do	.44	.44	July 1960	—	11.46	*4.88	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1964	4.3	11.26	*4.79	*90	.11	120	
60-31	Centennial Wash Tank	do	do	9/.60	9/.60	— 1954*	—	1.27	.397	—	—	—	[illegible]
	do	do	do	—	—	May 1965	*11	.67	.209	91.97	.09	160	
60-32	New Tank	do	do	9/1.88	9/1.88	— 1945	—	7.61	.759	—	—	—	[illegible]
	do	do	do	—	—	May 1965	20	4.08	.407	77.12	.094	158	
60-33	West Tank	do	Salome, Ariz.	.29	.29	June 1960	—	10.09	*6.51	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1964	4.3	9.93	*6.41	52.5	.13	148.7	
60-34	Upper Twin Tank	Tiger Wash	Aguila, Ariz.	1.83	1.83	Oct. 1944*	—	2.21	*.208	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1964	20	10/1.68	*.173	66	.015	15	
60-35	Harquahala Mt. Tank #1	Trib. of Brown's Canyon Wash	do	.11	.11	June 1958	—	6.44	*11.25	—	—	—	[illegible]
	do	do	do	—	—	Oct. 1964	6.3	6.50	*11.08	*90	.18	196	
60-36	Judia Wash Retarding Dam	Judia Wash	Salome, Ariz.	4.60	4.57	Jan. 1957	—	158.79	*1.849	—	—	—	[illegible]
	do	do	do	—	—	Jan. 1964	7	154.24	*1.798	76.9	.14	234.5	
	do	do	do	—	—	July 1964	.6	153.16	*1.784	*76.9	.39	653.2	

60-37a	Three Bar B Debris Basin	Trib. of Rock Creek	Roosevelt, Ariz.	.073	.073	Aug. 1959	--	11/.21	.05	—	—	—	FS
	do	do	do	--	--	Oct. 1960	1.17	--	—	*110	12/18.77	12/44,969	
	do	do	do	--	--	Oct. 1961	1.00	--	—	*110	12/4.66	12/11,159	
	do	do	do	--	--	Oct. 1962	1.00	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1964	2.00	--	—	*110	12/.55	12/1,313	
	do	do	do	--	--	Oct. 1965	1.00	--	—	*110	12/.14	12/328	
	do	do	do	--	--	Oct. 1966	1.00	--	—	*110	12/.27	12/656	
	do	do	do	--	--	Oct. 1967	1.00	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1968	1.00	--	—	*110	12/.14	12/328	
	do	do	do	--	--	Oct. 1969	1.00	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1970	1.00	--	—	*110	0	0	
60-38a	Three Bar C Debris Basin	do	do	.149	.149	Aug. 1959	--	11/.08	.002	—	—	—	FS
	do	do	do	--	--	Oct. 1960	1.17	--	—	*110	12/5.57	12/13,345	
	do	do	do	--	--	Oct. 1961	1.00	--	—	*110	12/.67	12/1,608	
	do	do	do	--	--	Oct. 1962	1.00	--	—	*110	12/.67	12/1,608	
	do	do	do	--	--	Oct. 1964	2.00	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1965	1.00	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1966	1.00	--	—	*110	12/.34	12/804	
	do	do	do	--	--	Oct. 1967	1.00	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1968	1.00	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1969	1.00	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1970	1.00	--	—	*110	0	0	
60-39a	Three Bar D Debris Basin	do	do	.126	.126	Aug. 1959	--	11/.21	.01	—	—	—	FS
	do	do	do	--	--	Oct. 1960	1.17	--	—	*110	12/12.70	12/30,427	
	do	do	do	--	--	Oct. 1961	1.00	--	—	*110	12/3.73	12/8,937	
	do	do	do	--	--	Oct. 1962	1.00	--	—	*110	12/.63	12/1,521	
	do	do	do	--	--	Oct. 1964	2.00	--	—	*110	12/.04	12/95	
	do	do	do	--	--	Oct. 1965	1.00	--	—	*110	12/.08	12/190	
	do	do	do	--	--	Oct. 1966	1.00	--	—	*110	12/.08	12/190	
	do	do	do	--	--	Oct. 1967	1.00	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1968	1.00	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1969	1.00	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1970	1.00	--	—	*110	0	0	
60-40a	Three Bar F Debris Basin	do	do	.107	.107	Mar. 1963	--	11/.04	.004	—	—	—	FS
	do	do	do	--	--	Oct. 1963	.51	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1964	1.0	--	—	*110	12/.37	12/886	
	do	do	do	--	--	Oct. 1965	1.0	--	—	*110	12/.09	12/224	
	do	do	do	--	--	Oct. 1966	1.0	--	—	*110	12/.19	12/448	
	do	do	do	--	--	Oct. 1967	1.0	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1968	1.0	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1969	1.0	--	—	*110	0	0	
	do	do	do	--	--	Oct. 1970	1.0	--	—	*110	13/.08	13/2,016	
60-41	Bennett 14	Walnut Gulch	Tombstone, Ariz.	.6	.6	June 1961	—	18	.6	—	—	—	SCS
	do	do	do	--	--	June 1967	6	17	.6	75	.2	326	
60-42	Cowan 7	do	do	.4	.4	June 1963	—	14	1.7	--	—	--	SCS
	do	do	do	--	--	June 1967	4	13.5	1.7	75	.25	410	
60-43	Horsethief Basin	Horsethief Canyon	Crown King, Ariz.	.85	.85	-- 1934	—	42.4	.44	—	—	—	FS
	do	do	do	--	--	Nov. 1969	36	35.6	.37	—	.22	—	
60-44	Lynx Lake	Lynx Creek	Prescott, Ariz.	18.14	*10	Nov. 1962	—	1,472	1.07	—	—	—	FS
	do	do	do	--	--	Nov. 1968	6	1,460	1.06	—	.197	—	
60-45	Granite Basin	Mint Wash	do	4.69	*4.69	-- 1939	--	89	*.32	—	—	—	FS
	do	do	do	--	--	Aug. 1967	28	58	*.21	--	.236	—	
60-46	Keller Tank	Trib. Verde River	Scottsdale, Ariz.	.06	.06	Apr. 1941	—	—	—	—	—	—	SCS
	do	do	do	—	--	Aug. 1970	29.2	1.529	*1.91	—	.09	—	
60-47	Gallota Tank	Trib. Cent. Wash	Tonopah, Ariz.	.66	.645	June 1939	—	—	—	—	--	—	SCS
	do	do	do	--	--	Apr. 1967	27.9	21	6.63	74.8	.21	342	
60-48	Wellick Tank	Trib. Flying "E" Wash	Wickenburg, Ariz.	.79	.77	May 1936	—	79.1	20.87	—	—	—	SCS
	do	do	do	--	--	Sept. 1970	14.3	77.3	20.39	94.1	.16	328	
60-49	Pouquette Tank	Trib. Cemetery Wash	do	.13	.129	May 1965	—	.99	1.59	—	—	—	SCS
	do	do	do	--	--	Dec. 1970	5.6	.91	1.46	88.2	.10	192	
			LITTLE COLORADO AND SAN JUAN RIVER BASINS										
61-1	Oak Creek Reservoir	Trib. of Zuni River	Zuni, N. Mex.	9.41	9.41	Oct. 1954	--	334.8	1.425	—	--	--	GS
	do	do	do	--	—	May 1960	14/6	148.0	.630	—	3.32	—	

1/ Drainage area includes 1.87 sq. mi. diverted from Hash Hollow.
2/ Reservoir was full of sediment in 1954.
3/ Constructed 1943, cleaned 1953.
4/ Constructed 1941, cleaned 1952.
5/ This reservoir is downstream from Upper Foote Wash Reservoir. Little or no sediment is contributed from the 4.17 sq. mi. above this dam.
6/ Based on total drainage area of 5,812 sq. mi. before construction of Horseshoe Dam upstream.
7/ Increase in capacity probably due to compaction.
8/ Capacity increased 76,130 ac.-ft. by installation of spillway gates in June 1950.
9/ Drainage area is smallest area that could be positively delineated.
10/ Storage capacity at original spillway crest elevation - storage capacity at eroded spillway elevation 0.53 ac.-ft.
11/ Basin cleaned as needed to maintain capacity.
12/ Includes sediment trapped above spillway level.
13/ Basin filled during storm of 9-5-70 and undetermined amount of sediment escapes from pond.
14/ Runoff seasons.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
				LITTLE COLORADO AND SAN JUAN RIVER BASINS (Continued)									
61-2a	Willet Seale Reservoir	Trib. of Silver Creek	Taylor, Ariz.	40.0	39.7	June 1959	—	1,342.0	2.1	—	—	—	SCS
	do	do	do	—	—	June 1962	3	1,299.4	2.0	67	0.69	1,097	
	do	do	do	—	—	June 1966	4	1,118.5	1.7	80	.89	1,551	
61-3	Stockyard Tank	Trib. Cottonwood Wash	Snowflake, Ariz.	.48	.476	— 1943	—	6.06	*.79	—	—	—	SCS
	do	do	do	—	—	May 1968	25	4.02	*.52	102.6	.17	376	
61-4	Thomas Tank I	do	do	.55	.549	— 1947	—	3.09	*.35	—	—	—	SCS
	do	do	do	—	—	June 1968	21	1.38	*.16	77.9	.15	250	
61-5	Ellsworth Tank	Trib. Show Low Creek	Taylor, Ariz.	.25	.249	— 1948	—	1.50	*.23	—	—	—	SCS
	do	do	do	—	—	Aug. 1968	20	1.27	*.19	80	.044	79	
61-6	New Tank	Trib. Cottonwood Wash	Snowflake, Ariz.	2.45	2.45	— 1938	—	10.13	*.15	—	—	—	SCS
	do	do	do	—	—	May 1968	30	9.10	*.14	87.7	.014	27	
61-7	West Hall Tank	do	Clay Springs, Ariz.	.32	.32	— 1944	—	.76	*.09	—	—	—	SCS
	do	do	do	—	—	June 1968	24	.61	*.07	93.4	.02	42	
61-8	Thomas Tank II	Trib. Perkins Spring Draw	do	.10	.10	June 1964	—	1.39	*.52	—	—	—	SCS
	do	do	do	—	—	July 1968	4	1.35	*.50	89.3	.10	196	
				COLORADO RIVER BASIN (HALLS CROSSING TO HOOVER DAM)									
62-1	Lake Mead (Hoover Dam)	Colorado River	Boulder City, Nev.	167,800	1/167,600	Feb. 1935	—	31,250,000	2.160	—	—	—	GS
	do	do	do	—	—	Sept. 1948 2/	13.7	29,827,000	2.043	3/65	.620	877	
62-2	Brooksby Tank	Trib. of Johnson Wash	Fredonia, Ariz.	.4	.4	— 1951	—	.697	.327	—	—	—	SCS
	do	do	do	—	—	Sept. 1965	4/14	.140	.066	97	4/.10	211	
62-3	Riggs Flat Charco	Sandy Canyon Wash	do	57.86	57.83	Oct. 1956	—	54.93	.178	—	—	—	SCS
	do	do	do	—	—	Sept. 1965	8.9	36.58	.119	72	.035	55	
62-4	Leroy Judd Tank	Trib. of Kanab Creek	do	.38	.38	— 1962	—	.95	.468	—	—	—	SCS
	do	do	do	—	—	Aug. 1965	3	.22	.108	105.7	.63	1,450	
62-5	Kaibab Indian Reservation Erosion Control Structure.	do	Indian Moccasin, Ariz.	1.27	1.27	— 1935	—	6.008	.807	—	—	—	SCS
	do	do	do	—	—	Oct. 1965	30	2.267	.332	87.2	.098	186	
62-6	Jesse Judd Tank	do	Fredonia, Ariz.	5/3.49	5/3.49	— 1955	—	7.10	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1965	6/10	2.77	—	*80	6/.12	209	
62-7	Frog Hollow Detention Res.	Frog Hollow Wash	Hurricane, Utah	9.2	9.2	Jan. 1957	—	223.0	*1.517	—	—	—	SCS
	do	do	do	—	—	Jan. 1958	*1	216.4	*1.472	*80	.72	1,255	
	do	do	do	—	—	Nov. 1965	7.8	160.8	*.950	*80	1.05	1,830	
62-8	CCC Pond (West)	Trib. Santa Clara River	St. George, Utah	.03	.03	— 1941	—	—	—	—	—	—	SCS
	do	do	do	—	—	Apr. 1966	25	*.2	*.63	98	7/.23	461	
62-9	CCC Pond (East)	do	do	.32	.32	— 1941	—	—	—	—	—	—	SCS
	do	do	do	—	—	Apr. 1966	25	*.2	*.06	90	7/.027	53	
62-10	Rondo Ranch Debris Basin #3	Trib. Virgin River	do	.026	.026	— 1944	—	—	—	—	—	—	SCS
	do	do	do	—	—	Feb. 1966	22	*1.5	*5.3	*90	7/3.35	6,566	
62-11	Rondo Ranch Debris Basin #1	do	do	.09	.09	— 1944	—	—	—	—	—	—	SCS
	do	do	do	—	—	Feb. 1966	22	*1.0	*1.0	*90	7/.61	1,196	
62-12	Iliff Andrus	Trib. Warner Draw	do	1.09	1.08	— 1949	—	—	—	—	—	—	SCS
	do	do	do	—	—	Jan. 1966	17	*20	*2.2	78	7/.76	1,290	
62-13	Winfred Spendlove	Trib. Fort Pearce Wash	do	.85	.84	— 1946	—	—	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1966	20	*7.0	*1.1	87.5	7/.48	800	
62-14	Black Knolls	Trib. City Creek	do	.59	.58	— 1922	—	—	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1965	43	*20	*3.2	*75	.36	585	
62-15	Little Grassy Pond	Unknown	do	2.3	2.3	— 1943	—	—	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1966	23	*2.0	—	94	7/.043	88	
62-16	Bill Shaw Pond	Trib. Santa Clara River	do	.097	.097	— 1956	—	—	—	—	—	—	SCS
	do	do	do	—	—	June 1966	10	*2.0	*3.3	72	7/1.79	2,800	
62-17	Manganese Wash	Manganese Wash	do	.17	.17	— 1956	—	—	—	—	—	—	SCS
	do	do	do	—	—	Apr. 1966	10	*1.0	*.2	80	7/.38	668	
				COLORADO RIVER BASIN (ABOVE HALLS CROSSING) Gunnison, Dolores and Fremont River Basins									
63-1	Badger Detention (14)	Badger Wash	Mack, Colo.	1.53	1.49	May 1957	—	201.52	3.336	—	—	—	GS
	do	do	do	—	—	Nov. 1958	1.6	199.35	3.300	—	.91	—	
	do	do	do	—	—	Nov. 1959	1.0	196.27	3.250	—	2.07	—	
	do	do	do	—	—	Nov. 1961	2.0	190.38	3.152	—	1.97	—	

63-2	Badger Wash West Twin (2A)	do	do	.167	.165	Dec.	1953	—	6.30	.957	—	—	—	[illegible]
	do	do	do	—	—	July	1955	1.6	4.47	.679	—	6.91	—	
	do	do	do	—	—	Nov.	1956	1.4	4.47	.679	—	0	—	
	do	do	do	—	—	Oct.	1957	1.0	3.98	.605	—	2.97	—	
	do	do	do	—	—	Nov.	1958	1.0	3.98	.605	—	0	—	
	do	do	do	—	—	Nov.	1959	1.0	3.65	.555	—	2.00	—	
	do	do	do	—	—	Nov.	1961	2.0	2.43	.369	—	3.70	—	
63-3	Badger Wash Lower Oil Well (3A)	do	do	.059	.055	Dec.	1953	—	12.90	4.813	—	—	—	[illegible]
	do	do	do	—	—	July	1955	1.6	12.65	4.720	—	2.91	—	
	do	do	do	—	—	Nov.	1956	1.4	12.65	4.720	—	0	—	
	do	do	do	—	—	Oct.	1957	1.0	12.55	4.683	—	1.88	—	
	do	do	do	—	—	Nov.	1958	1.0	12.55	4.683	—	0	—	
	do	do	do	—	—	Nov.	1959	1.0	12.33	4.601	—	4.00	—	
	do	do	do	—	—	Nov.	1961	2.0	12.12	4.520	—	1.82	—	
63-4	East Basin (11)	do	do	.089	.087	Apr.	1954	—	5.45	1.135	—	—	—	[illegible]
	do	do	do	—	—	Nov.	1956	2.6	4.98	1.085	—	2.30	—	
	do	do	do	—	—	Oct.	1957	1.0	4.76	.992	—	1.86	—	
	do	do	do	—	—	Nov.	1959	2.0	4.65	.969	—	.69	—	
63-5	Middle Basin (12)	do	do	.092	.088	Apr.	1954	—	16.93	2.996	—	—	—	[illegible]
	do	do	do	—	—	Nov.	1956	2.6	15.87	2.809	—	4.46	—	
	do	do	do	—	—	Oct.	1957	1.0	15.38	2.722	—	3.57	—	
	do	do	do	—	—	Nov.	1959	2.0	15.33	2.712	—	.34	—	
63-6a	Prairie Dog (4A)	Trib. Badger Wash	do	.022	.022	Dec.	1953	—	3.05	4.36	—	—	—	[illegible]
	do	do	do	—	—	July	1955	1.6	2.64	3.77	*90	11.8	23,130	
	do	do	do	—	—	Nov.	1956	1.3	2.64	3.77	*90	0	—	
	do	do	do	—	—	Oct.	1957	1.0	2.49	3.56	*90	6.82	13,365	
	do	do	do	—	—	Nov.	1958	1.1	2.49	3.56	*90	0	—	
	do	do	do	—	—	Nov.	1959	1.0	2.43	3.47	*90	2.73	5,346	
	do	do	do	—	—	Nov.	1961	2.0	2.28	3.26	*90	3.18	6,882	
	do	do	do	—	—	Nov.	1963	2.0	2.17	3.10	*90	2.27	4,920	
	do	do	do	—	—	Nov.	1964	1.0	2.03	2.90	*90	6.36	12,476	
	do	do	do	—	—	Nov.	1965	1.0	1.82	2.60	*90	9.55	18,711	
	do	do	do	—	—	Nov.	1966	1.0	1.91	2.73	*90	—	—	
	do	do	do	—	—	Oct.	1967	1.0	1.80	2.57	*90	5.50	9,022	
	do	do	do	—	—	Nov.	1968	1.0	1.66	2.37	*90	6.36	10,496	
	do	do	do	—	—	June	1970	1.6	8/2.52	3.60	*90	0	—	
	do	do	do	—	—	Oct.	1970	.4	2.50	3.57	*90	2.27	4,455	
63-7	Southeast (13)	Badger Wash	do	.484	.477	Apr.	1954	—	27.25	1.856	—	—	—	[illegible]
	do	do	do	—	—	Nov.	1956	2.6	24.85	1.690	—	1.93	—	
	do	do	do	—	—	Oct.	1957	1.0	23.46	1.595	—	2.98	—	
	do	do	do	—	—	Nov.	1959	2.0	22.26	1.514	—	1.34	—	
63-8a	Upper Basin (14)	Trib. Badger Wash	do	.066	.066	Dec.	1953	—	8.30	3.81	—	—	—	[illegible]
	do	do	do	—	—	July	1955	1.6	7.99	3.48	*90	6.68	13,096	
	do	do	do	—	—	Nov.	1956	1.3	7.99	2.56	*90	0	—	
	do	do	do	—	—	Nov.	1957	1.0	7.34	3.37	*90	3.78	7,425	
	do	do	do	—	—	Nov.	1958	1.1	7.34	3.37	*90	0	—	
	do	do	do	—	—	Nov.	1959	1.0	7.04	3.23	*90	4.55	9,063	
	do	do	do	—	—	Nov.	1961	2.0	6.70	3.07	*90	2.73	5,198	
	do	do	do	—	—	Nov.	1963	2.0	6.59	3.02	*90	.83	1,636	
	do	do	do	—	—	Nov.	1964	1.0	6.55	3.00	*90	.60	1,188	
	do	do	do	—	—	Nov.	1965	1.0	6.10	2.86	*90	6.82	13,365	
	do	do	do	—	—	Nov.	1966	1.0	6.16	2.82	*90	9/—	—	
	do	do	do	—	—	Oct.	1967	1.0	6.00	2.75	*90	2.41	4,752	
	do	do	do	—	—	Nov.	1968	1.0	5.48	2.51	*90	7.86	15,444	
	do	do	do	—	—	Nov.	1969	1.0	5.54	2.56	*90	9/—	—	
63-9	West Twin (2-A)	do	do	.148	.148	Dec.	1953	—	6.30	1.31	—	—	—	[illegible]
	do	do	do	—	—	July	1955	1.6	4.38	.91	*90	8.10	15,878	
	do	do	do	—	—	Nov.	1956	1.3	4.38	.91	*90	0	—	
	do	do	do	—	—	Oct.	1957	1.0	3.90	.81	*90	3.24	6,357	
	do	do	do	—	—	Nov.	1958	1.1	3.90	.81	*90	0	—	
	do	do	do	—	—	Nov.	1959	1.0	10/15.08	3.13	*90	1.49	2,916	
	do	do	do	—	—	Nov.	1961	2.0	13.86	2.88	*90	4.12	8,077	
	do	do	do	—	—	Nov.	1963	2.0	13.52	2.80	*90	1.15	2,252	
	do	do	do	—	—	Nov.	1964	1.0	12.39	2.57	*90	7.64	14,986	
	do	do	do	—	—	Nov.	1965	1.0	12.06	2.50	*90	2.25	4,371	
	do	do	do	—	—	Nov.	1966	1.0	12.10	2.51	*90	9/—	—	
	do	do	do	—	—	Oct.	1967	1.0	11.53	2.39	*90	3.85	7,549	
	do	do	do	—	—	Nov.	1968	1.0	10.56	2.09	*90	6.55	12,847	
	do	do	do	—	—	Nov.	1969	1.0	10.64	2.10	*90	9/—	—	

1/ Not adjusted for numerous small reservoirs. Runoff used to compute C/I ratio was not adjusted for upstream diversion.

2/ Period of survey was from Mar. 1948 - Mar. 1949.

3/ Based on measured and estimated sediment inflow of 2,000,000,000 tons in 13.7 yr. period.

4/ Estimated effective life of pond is 5 yr. 1951 - 1956.

5/ Reservoir is off main channel. Estimate reservoir intercepts 1/3 of flow and sediment from total drainage area.

6/ Effective life of reservoir is estimated at 8 yr. storm in 1963 filled reservoir and changed channel course.

7/ Includes deposition above spillway crest level.

8/ Reservoir cleaned in June 1970.

9/ Capacity increase.

10/ Dam and spillway raised in 1959.

* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	COLORADO RIVER BASIN (ABOVE HALLS CROSSING) Gunnison, Dolores and Fremont River Basins (Continued)												
63-10	Oil Well (3-A)	Trib. of Badger Wash	Mack, Colo.	0.059	0.059	Dec. 1953	—	12.92	5.71	—	—	—	GS
	—do—	—do—	—do—	—	—	July 1955	1.6	12.18	5.39	*90	7.80	15,289	
	—do—	—do—	—do—	—	—	Nov. 1956	1.3	12.18	5.39	*90	0	—	
	—do—	—do—	—do—	—	—	Oct. 1957	1.0	11.90	5.26	*90	4.75	9,302	
	—do—	—do—	—do—	—	—	Nov. 1958	1.1	11.90	5.26	*90	0	—	
	—do—	—do—	—do—	—	—	Nov. 1959	1.0	11.64	5.15	*90	4.40	8,638	
	—do—	—do—	—do—	—	—	Nov. 1961	2.0	11.31	5.00	*90	2.71	5,482	
	—do—	—do—	—do—	—	—	Nov. 1963	2.0	11.25	4.98	*90	.51	997	
	—do—	—do—	—do—	—	—	Nov. 1964	1.0	11.21	4.96	*90	.68	1,329	
	—do—	—do—	—do—	—	—	Nov. 1965	1.0	10.73	4.75	*90	8.14	15,967	
	—do—	—do—	—do—	—	—	Nov. 1966	1.0	10.82	4.79	*90	1/—	—	
	—do—	—do—	—do—	—	—	Oct. 1967	1.0	10.62	4.70	*90	3.39	6,645	
	—do—	—do—	—do—	—	—	Nov. 1968	1.0	10.15	4.69	*90	7.96	15,615	
	—do—	—do—	—do—	—	—	Nov. 1969	1.0	10.13	4.68	*90	.34	664	
	—do—	—do—	—do—	—	—	Oct. 1970	1.0	9.99	4.62	*90	2.38	4,651	
63-11	Windy Point (4-B)	—do—	—do—	.019	.019	Dec. 1953	—	4.52	9.62	—	—	—	GS
	—do—	—do—	—do—	—	—	July 1955	1.6	4.31	9.17	*90	6.85	13,427	
	—do—	—do—	—do—	—	—	Nov. 1956	1.3	4.31	9.17	*90	0	—	
	—do—	—do—	—do—	—	—	Oct. 1957	1.0	4.19	8.91	*90	6.32	12,380	
	—do—	—do—	—do—	—	—	Nov. 1958	1.1	4.19	8.91	*90	0	—	
	—do—	—do—	—do—	—	—	Nov. 1959	1.0	4.16	8.85	*90	1.58	3,095	
	—do—	—do—	—do—	—	—	Nov. 1961	2.0	4.14	8.80	*90	.53	1,032	
	—do—	—do—	—do—	—	—	Nov. 1963	2.0	4.12	8.76	*90	.53	1,032	
	—do—	—do—	—do—	—	—	Nov. 1964	1.0	4.03	8.57	*90	4.74	9,265	
	—do—	—do—	—do—	—	—	Nov. 1965	1.0	3.89	8.28	*90	7.37	14,443	
	—do—	—do—	—do—	—	—	Nov. 1966	1.0	3.89	8.28	*90	0	—	
	—do—	—do—	—do—	—	—	Oct. 1967	1.0	3.81	8.11	*90	4.21	8,253	
	—do—	—do—	—do—	—	—	Nov. 1968	1.0	3.74	7.96	*90	3.68	7,222	
	—do—	—do—	—do—	—	—	Nov. 1969	1.0	3.83	8.15	*90	1/—	—	
63-12	Tuxes (2-B)	—do—	—do—	.158	.158	Dec. 1953	—	8.45	2.14	—	—	—	GS
	—do—	—do—	—do—	—	—	July 1955	1.6	6.05	1.53	*90	9.50	18,622	
	—do—	—do—	—do—	—	—	Nov. 1956	1.3	6.05	1.53	*90	0	—	
	—do—	—do—	—do—	—	—	Oct. 1957	1.0	5.94	1.50	*90	.70	1,365	
	—do—	—do—	—do—	—	—	Nov. 1958	1.1	5.94	1.50	*90	0	—	
	—do—	—do—	—do—	—	—	Nov. 1959	1.0	2/24.80	6.28	*90	2.15	2,860	
	—do—	—do—	—do—	—	—	Nov. 1961	2.0	24.18	6.12	*90	1.96	3,846	
	—do—	—do—	—do—	—	—	Nov. 1963	2.0	23.89	6.05	*90	.95	1,110	
	—do—	—do—	—do—	—	—	Nov. 1964	1.0	23.65	5.94	*90	2.78	5,459	
	—do—	—do—	—do—	—	—	Nov. 1965	1.0	23.15	5.86	*90	1.90	3,722	
	—do—	—do—	—do—	—	—	Nov. 1966	1.0	23.23	5.88	*90	1/—	—	
	—do—	—do—	—do—	—	—	Oct. 1967	1.0	22.86	5.79	*90	2.34	4,590	
	—do—	—do—	—do—	—	—	Nov. 1968	1.0	21.88	5.54	*90	6.20	12,158	
	—do—	—do—	—do—	—	—	Nov. 1969	1.0	22.12	5.60	*90	1/—	—	
63-13	North Basin (3-B)	—do—	—do—	.048	.048	Dec. 1953	—	8.10	4.60	—	—	—	GS
	—do—	—do—	—do—	—	—	July 1955	1.6	7.69	4.37	*90	5.42	10,626	
	—do—	—do—	—do—	—	—	Nov. 1956	1.3	7.69	4.37	*90	0	—	
	—do—	—do—	—do—	—	—	Oct. 1957	1.0	7.58	4.31	*90	2.29	4,492	
	—do—	—do—	—do—	—	—	Nov. 1958	1.1	7.58	4.31	*90	0	—	
	—do—	—do—	—do—	—	—	Nov. 1959	1.0	7.51	4.27	*90	1.46	2,859	
	—do—	—do—	—do—	—	—	Nov. 1961	2.0	7.38	4.19	*90	1.46	2,636	
	—do—	—do—	—do—	—	—	Nov. 1963	2.0	7.10	4.03	*90	2.92	5,717	
	—do—	—do—	—do—	—	—	Nov. 1964	1.0	7.05	4.00	*90	1.04	2,042	
	—do—	—do—	—do—	—	—	Nov. 1965	1.0	6.81	3.87	*90	5.00	9,008	
	—do—	—do—	—do—	—	—	Nov. 1966	1.0	6.81	3.87	*90	0	—	
	—do—	—do—	—do—	—	—	Oct. 1967	1.0	6.54	3.72	*90	5.63	11,036	
	—do—	—do—	—do—	—	—	Nov. 1968	1.0	6.07	3.45	*90	9.80	19,194	
	—do—	—do—	—do—	—	—	Nov. 1969	1.0	6.18	3.51	*90	1/—	—	
	—do—	—do—	—do—	—	—	Oct. 1970	1.0	6.13	3.48	*90	1.04	2,042	

63-14	Lower Hanks (1-8)	do	do	.084	.084	Dec.	1953	—	19.80	8.69	—	—	—	CS
	do	do	do	—	—	July	1955	1.6	19.17	8.41	*90	4.65	9,095	
	do	do	do	—	—	Nov.	1956	1.3	19.17	8.41	*90	0	0	
	do	do	do	—	—	Oct.	1957	1.0	19.17	8.41	*90	0	0	
	do	do	do	—	—	Nov.	1958	1.1	19.17	8.41	*90	0	0	
	do	do	do	—	—	Nov.	1959	1.0	19.17	8.41	*90	0	0	
	do	do	do	—	—	Nov.	1961	2.0	18.85	8.27	*90	1.90	3,736	
	do	do	do	—	—	Nov.	1963	2.0	18.76	8.22	*90	.39	1,883	
	do	do	do	—	—	Nov.	1964	1.0	18.72	8.21	*90	.36	687	
	do	do	do	—	—	Nov.	1965	1.0	18.38	8.06	*90	4.05	7,936	
	do	do	do	—	—	Nov.	1966	1.0	18.42	8.08	*90	1/—	—	
	do	do	do	—	—	Oct.	1967	1.0	18.35	8.00	*90	2.08	3,987	
	do	do	do	—	—	Nov.	1968	1.0	17.63	7.73	*90	7.38	14,468	
	do	do	do	—	—	Nov.	1969	1.0	17.60	7.72	*90	.36	750	
63-15	Rose Mountain No.1	Trib. Alkali Creek	Wolcott, Colo.	.0116	.011	July	1964	—	1.877	—	—	—	—	CS
	do	do	do	—	—	Nov.	1965	.30	1.851	2.64	*90	7.91	15,500	
	do	do	do	—	—	Oct.	1966	1.0	1.860	2.66	*90	1/—	—	
	do	do	do	—	—	Nov.	1967	1.0	1.852	2.65	*90	.73	1,420	
	do	do	do	—	—	Nov.	1968	1.0	1.842	2.63	*90	.91	1,780	
	do	do	do	—	—	Nov.	1969	1.0	1.841	2.63	*90	.09	178	
	do	do	do	—	—	Nov.	1970	1.0	1.837	2.62	*90	.36	710	
63-16	Rose Mountain No. 3	do	do	.008	.008	July	1965	—	1.668	3.26	—	—	—	CS
	do	do	do	—	—	Nov.	1965	.38	1.646	3.16	*90	18.0	36,050	
	do	do	do	—	—	Oct.	1966	1.0	1.651	3.18	*90	1/—	—	
	do	do	do	—	—	Nov.	1967	1.0	1.634	3.14	*90	2.13	4,165	
	do	do	do	—	—	Nov.	1968	1.0	1.637	3.15	*90	1/—	—	
	do	do	do	—	—	Nov.	1969	1.0	1.629	3.11	*90	2.25	4,410	
	do	do	do	—	—	Nov.	1970	1.0	1.623	3.10	*90	.75	1,470	
63-17	Fool Creek Debris Basin	Fool Creek	Fraser, Colo.	1.11	1.11	Oct.	1951	—	—	—	—	—	—	FS
	do	do	do	—	—	Oct.	1952	1.0	—	—	—	.032	65.28	
	do	do	do	—	—	Oct.	1953	1.0	—	—	—	.016	32.64	
	do	do	do	—	—	Oct.	1954	1.0	—	—	—	—	0	
	do	do	do	—	—	Oct.	1955	1.0	—	—	—	—	0	
	do	do	do	—	—	Oct.	1956	1.0	—	—	—	.046	93.12	
	do	do	do	—	—	Oct.	1957	1.0	—	—	—	.051	103.76	
	do	do	do	—	—	Oct.	1958	1.0	—	—	—	.031	62.08	
	do	do	do	—	—	Oct.	1959	1.0	—	—	—	.006	12.48	
	do	do	do	—	—	Oct.	1960	1.0	—	—	—	.010	20.16	
	do	do	do	—	—	Oct.	1961	1.0	—	—	—	.004	8.96	
	do	do	do	—	—	Oct.	1962	1.0	—	—	—	.012	23.68	
	do	do	do	—	—	Oct.	1963	1.0	—	—	—	—	0	
	do	do	do	—	—	Oct.	1964	1.0	—	—	—	—	0	
	do	do	do	—	—	Oct.	1965	1.0	—	—	—	.018	36.16	
	do	do	do	—	—	Oct.	1966	1.0	—	—	—	.004	8.0	
	do	do	do	—	—	Oct.	1967	1.0	—	—	—	.005	10.32	
	do	do	do	—	—	Oct.	1968	1.0	—	—	—	.008	17.96	
	do	do	do	—	—	Oct.	1969	1.0	—	—	—	.010	20.48	
	do	do	do	—	—	Oct.	1970	1.0	—	—	—	.013	26.66	
63-18	Deadhorse Weir	Deadhorse Creek	do	1.04	1.04	Oct.	1954	—	—	—	—	—	—	FS
	do	do	do	—	—	Oct.	1955	1.0	—	—	—	.003	6.4	
	do	do	do	—	—	Oct.	1956	1.0	—	—	—	.013	26.88	
	do	do	do	—	—	Oct.	1957	1.0	—	—	—	.017	35.52	
	do	do	do	—	—	Oct.	1958	1.0	—	—	—	.002	3.2	
	do	do	do	—	—	Oct.	1959	1.0	—	—	—	.004	7.68	
	do	do	do	—	—	Oct.	1960	1.0	—	—	—	.004	7.68	
	do	do	do	—	—	Oct.	1961	1.0	—	—	—	.001	1.60	
	do	do	do	—	—	Oct.	1962	1.0	—	—	—	.009	19.84	
	do	do	do	—	—	Oct.	1963	1.0	—	—	—	.001	1.28	
	do	do	do	—	—	Oct.	1964	1.0	—	—	—	.001	2.24	
	do	do	do	—	—	Oct.	1965	1.0	—	—	—	.005	11.20	
	do	do	do	—	—	Oct.	1966	1.0	—	—	—	.001	1.28	
	do	do	do	—	—	Oct.	1967	1.0	—	—	—	.0004	.83	
	do	do	do	—	—	Oct.	1968	1.0	—	—	—	.001	1.61	
	do	do	do	—	—	Oct.	1969	1.0	—	—	—	.002	3.46	
	do	do	do	—	—	Oct.	1970	1.0	—	—	—	.005	10.71	

1/ Capacity increase.
2/ Dam and spillway raised in 1959.

* Estimated or assumed.

SUMMARY OF

RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE -FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
COLORADO RIVER BASIN (ABOVE HALLS CROSSING) Gunnison, Dolores and Fremont River Basins (Continued)													
63-19	Lexen Creek Weir	Lexen Creek	Fraser, Colo.	0.48	0.48	Oct. 1955	—	—	—	—	—	—	FS
	do	do	do	—	—	Oct. 1956	1.0	—	—	—	0.005	10.24	
	do	do	do	—	—	Oct. 1957	1.0	—	—	—	.009	17.92	
	do	do	do	—	—	Oct. 1958	1.0	—	—	—	.011	21.12	
	do	do	do	—	—	Oct. 1959	1.0	—	—	—	.002	3.84	
	do	do	do	—	—	Oct. 1960	1.0	—	—	—	.002	3.52	
	do	do	do	—	—	Oct. 1961	1.0	—	—	—	.0005	.64	
	do	do	do	—	—	Oct. 1962	1.0	—	—	—	.005	8.96	
	do	do	do	—	—	Oct. 1963	1.0	—	—	—	.0002	.32	
	do	do	do	—	—	Oct. 1964	1.0	—	—	—	.002	2.88	
	do	do	do	—	—	Oct. 1965	1.0	—	—	—	.003	5.76	
	do	do	do	—	—	Oct. 1966	1.0	—	—	—	.002	2.24	
	do	do	do	—	—	Oct. 1967	1.0	—	—	—	.001	1.73	
	do	do	do	—	—	Oct. 1968	1.0	—	—	—	.001	1.90	
	do	do	do	—	—	Oct. 1969	1.0	—	—	—	.001	1.90	
	do	do	do	—	—	Oct. 1970	1.0	—	—	—	.002	4.00	
63-20	East St. Louis Creek Weir	East St. Louis Creek	do	3.10	3.10	Oct. 1964	1.0	—	—	—	—	—	FS
	do	do	do	—	—	Oct. 1965	1.0	—	—	*100	.002	3.45	
	do	do	do	—	—	Oct. 1966	1.0	—	—	*100	.001	1.35	
	do	do	do	—	—	Oct. 1967	1.0	—	—	*100	.002	3.40	
	do	do	do	—	—	Oct. 1968	1.0	—	—	*100	.002	4.20	
	do	do	do	—	—	Oct. 1969	1.0	—	—	*100	.001	2.90	
	do	do	do	—	—	Oct. 1970	1.0	—	—	*100	.002	4.25	
63-21	HW-1 Roatcap Wash Watershed	Roatcap Wash	Olathe, Colo.	11.6	11.5	Dec. 1964	—	829.6	*7.0	—	—	—	SCS
	do	do	do	—	—	Nov. 1970	6	810.0	*6.9	—	.28	—	
GREEN RIVER BASIN													
64-1	Duck Fork	Ferron Creek	Ferron, Utah	3.56	3.56	— 1942	—	718	*.236	—	—	—	SCS
	do	do	do	—	—	Oct. 1962	20	1/870	*.286	*60	.14	183	
64-2	South Soda Creek Weir	South Soda Creek	Steamboat Springs, Colo.	3.40	3.40	Oct. 1967	—	—	—	—	—	—	FS
	do	do	do	—	—	Oct. 1968	1.0	—	—	*135	.005	13.43	
	do	do	do	—	—	Oct. 1969	1.0	—	—	*135	.0003	2.08	
	do	do	do	—	—	Oct. 1970	1.0	—	—	*135	.005	4.92	
64-3	North Fish Creek Weir	North Fish Creek	do	2.24	—	Oct. 1968	—	—	—	—	—	—	FS
	do	do	do	—	—	Oct. 1969	1.0	—	—	*135	.002	1.62	
	do	do	do	—	—	Oct. 1970	1.0	—	—	*135	.006	11.74	
64-4	West Walton Creek Weir	Trib. Walton Creek	do	1.33	1.33	Oct. 1967	—	—	—	—	—	—	FS
	do	do	do	—	—	Oct. 1968	1.0	—	—	*110	.016	38.28	
	do	do	do	—	—	Oct. 1969	1.0	—	—	*110	.006	15.07	
	do	do	do	—	—	Oct. 1970	1.0	—	—	*110	.020	47.90	
64-5	Bullwinkle	Trib. Brush Creek	Vernal, Utah	.11	.11	— 1938	—	—	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1968	30	*5.0	—	*70	2/.79	1,204	
64-6	Rock Canyon	Rock Canyon	do	1.41	1.41	— 1936	—	—	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1968	22	*5.0	—	*60	.011	14	
64-7	Miles Maslem Pond	Trib. Steinaker Draw	do	.095	.095	— 1952	—	—	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1967	15	*2.0	—	*70	2/.67	1,021	
64-8	Masser Reservoir	Trib. Twelve Mile Wash	do	.65	.65	— 1942	—	—	—	—	—	—	SCS
	do	do	do	—	—	May 1968	26	*8.0	—	*90	2/.23	450	
GREAT SALT LAKE BASIN													
65-1	East Canyon	East Canyon Creek	Morgan, Utah	144	144	— 1896	—	3/3,850	.098	—	—	—	BR
	do	do	do	—	—	Oct. 1954	58	28,730	.733	4/77.1	.124	208	
65-2	Echo	Weber River	Echo, Utah	732	732	Oct. 1930	—	75,718	.373	—	—	—	BR
	do	do	do	—	—	Oct. 1954	24	73,900	.364	4/71	.104	161	
65-3a	Santaquin Debris Basin	Summit Creek	Santaquin, Utah	17.65	13.5	Fall 1954	—	*84	.008	—	—	—	SCS
	do	do	do	—	—	Dec. 1957	3	*65	.006	*90	.47	921	
SEVIER RIVER BASIN													
66-1	Booby Hole	Booby Hole Creek	Koosharem, Utah	5.0	4.9	— 1895	—	607	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1960	75	598	—	—	.024	—	

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66-2	Indian Creek No. 1	Indian Creek	Beaver, Utah	12.0	11.95	— 1898	—	318	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1940	42	299	—	—	.038	—	
66-3	Rocky Ford	Beaver River	do	510	508	Feb. 1915	—	23,260	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1940	25.8	21,909	—	—	.134	—	
66-4	Rocky Ford	Sevier River	Sigurd, Utah	900	900	— 1890	—	2,115	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1940	50	790	—	—	.029	—	
66-5	Shutumpah	Shutumpah Creek	Salina, Utah	10.0	9.92	— 1893	—	667	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1940	47	430	—	—	.508	—	
66-6	Enterprise	Pine Creek	Enterprise, Utah	25.0	23.4	— 1909	—	9,000	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1940	31	8,550	—	—	.620	—	
66-7	Yankee Meadows	Pole Creek	Parowan, Utah	7.0	6.9	Dec. 1926	—	2,900	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1940	14	2,200	—	—	3.10	—	
66-8	Piute	Sevier River	Marysville, Utah	2,440	2,436	— 1910 3/	—	81,200	—	—	—	—	SCS
	do	do	do	—	—	— 1938	28	74,010	—	—	.106	—	
66-9	Sevier Bridge	do	Nephi, Utah	5,120	1,089	— 1908	—	290,000	—	—	—	—	SCS
	do	do	do	—	—	— 1932	24	234,462	—	—	.594	—	
66-10	Chalk Creek Debris Basin	Chalk Creek	Fillmore, Utah	61.8	*60	July 1936	.5	44.12	.002	*70	6/.73	1,112.9	SCS
	do	do	do	—	—	— 1946	10	0	0	*75	7/.16	228.7	
	do	do	do	—	—	Mar. 1955	8.5	0	0	75	—	—	
66-11a	Fiddlers Canyon Debris Basin	Fiddlers Canyon	Cedar City, Utah	12.6	12.6	— 1947	—	—	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1956	9	*15.00	*.089	*70	8/.143	131	
66-12a	Mill Canyon Retarding Structure	Mill Canyon	Glenwood, Utah	19.5	19.5	Dec. 1957	—	208	*1.600	--	—	-	SCS
	do	do	do	—	—	Dec. 1960	3	186	*1.431	*70	.38	578	
			GREAT BASIN (NORTHWESTERN PART IN CALIFORNIA, NEVADA AND OREGON)										
67-													
			GREAT BASIN Humboldt, Carson, and Truckee River Basins										
68-1	Willow Creek	Willow Creek	Elko, Nev.	112	111	— 1926	—	15,300	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1939	13	15,050	—	—	.15	—	
68-2	Elko Summit Reservoir No. 1	(ephemeral)	do	1.25	1.25	Mar. 1961	—	7.44	.223	—	—	—	SCS
	do	do	do	—	—	Aug. 1963	22.4	6.38	.192	66	.04	57.5	
68-3	Elko Summit Reservoir No. 2	do	do	.63	.63	Aug. 1945	—	5.45	.324	—	—	—	SCS
	do	do	do	—	—	Aug. 1963	18	4.96	.295	66.9	.05	73	
68-4	Dorsey Creek Reservoir	Dorsey Creek	do	9.16	9.14	Oct. 1952	—	131	.358	—	—	—	SCS
	do	do	do	—	—	Sept. 1963	10.9	128	.350	56.9	8/.12	8/149	
			GREAT BASIN Owens, Walker, and Mono Lake Drainages										
69-1	Weber	Walker River	Shurz, Nev.	2,800	2,440	Sept. 1935	—	13,200	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1939	4	12,980	—	—	.02	—	
			SALTON SEA AND SOUTHERN CALIFORNIA COASTAL AND GREAT BASIN DRAINAGE										
70-1a	Fullerton Flood-Control Basin	Fullerton Creek	Brea, Calif.	9/5.05	9/4.95	Oct. 1941	—	753.5	—	—	—	—	CE
	do	do	do	—	—	Nov. 1944	3.1	743.0	—	—	.40	—	
	do	do	do	—	—	Mar. 1962	17.3	706.3	—	—	.42	—	
70-2	Lake Hodges	San Dieguito River	Escondido, Calif.	303	301	Jan. 1919	—	36,601	—	—	—	—	SCS
	do	do	do	—	—	July 1935	16.5	34,779	—	*65	.365	527	
	do	do	do	—	--	July 1948	13.0	33,482	—	—	.332	470	
70-3	Railroad Canyon	San Jacinto River	Elsinore, Calif.	718	651	May 1928	—	12,218	—	—	—	—	SCS
	do	do	do	—	—	June 1939	11	12,034	—	*60	.03	39	
70-4	Lake Sherwood	Triunfo Creek	Hollywood, Calif.	16	15.7	— 1905	—	2,870	—	—	—	—	SCS
	do	do	do	—	—	Mar. 1936	31	2,792	—	*50	.16	176	
	do	do	do	--	—	Mar. 1938	2	2,772	—	—	.64	697	
70-5	Stone Canyon	Stone Canyon Creek	Sawtelle, Calif.	1.36	1.16	May 1921	--	7,998	—	—	—	—	SCS
	do	do	do	--	—	June 1939	18.1	7,949	—	*60	2.34	3,058	
70-6	Bonita Canyon	Bonita Creek	Orange, Calif.	4.00	4.00	Jan. 1938	--	326	—	—	—	—	SCS
	do	do	do	—	—	June 1939	10/2	305	—	*60	2.63	3,437	

1/ Dam was raised about 6 ft. in 1952.
2/ Includes above crest deposits.
3/ Formed by original rock-filled dam 58 feet high, which was subsequently raised in 1900, 1902, and 1916.
4/ Computed from Size analysis.
5/ Original survey made in 1908.
6/ Basin filled with sediment by one summer flash flood.
7/ Has no meaning as a large portion of the sediment passed through the basin.
8/ Includes some deposition above crest of spillway.
9/ Drainage area and sediment contributing area were increased when Loftus diversion channel was completed on Dec. 21, 1956.
10/ Based on runoff seasons.
* Estimated or assumed.

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SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
SALTON SEA AND SOUTHERN CALIFORNIA COASTAL AND GREAT BASIN DRAINAGE (Continued)													
70-7	Bouquet Canyon	Bouquet Creek	San Fernando, Calif.	12.6	11.6	Mar. 1934	--	36,900	--	--	--	--	SCS
	do.	do.	do.	--	--	June 1939	1/5	36,436	--	60	1.10	958	
70-8a	Chatsworth	Trib. of Los Angeles River	do.	5.40	4.45	Apr. 1918	--	10,125	--	--	--	--	SCS
	do.	do.	do.	--	--	June 1939	21	10,077	--	60	.51	444	
70-9	Lake Hemet	Trib. of San Jacinto River	Hemet, Calif.	66.0	65.3	-- 1892	--	14,000	--	--	--	--	SCS
	do.	do.	do.	--	--	June 1940	48	11,702	--	75	.73	1,190	
70-10	Laguna	Trib. of Newport Bay	Orange, Calif.	.75	.72	Feb. 1938	--	276	--	--	--	--	SCS
	do.	do.	do.	--	--	June 1939	1/2	266	--	60	5.56	4,840	
70-11	Encino	Encino Creek	Los Angeles, Calif.	1.42	1.30	May 1921	--	3,239	--	--	--	--	SCS
	do.	do.	do.	--	--	June 1939	18	3,210	--	60	.815	710	
70-12	Fairmont	Antelope Valley River	Lancaster, Calif.	2.64	2.37	Oct. 1913	--	7,487	--	--	--	--	SCS
	do.	do.	do.	--	--	June 1939	1/26	7,393	--	--	1.53	--	
70-13b	Little Rock Irrigation Dist.	Little Rock Creek	Palmdale, Calif.	68.0	67.86	Apr. 1924	--	4,387	--	--	--	--	SCS
	do.	do.	do.	--	--	Jan. 1936	1/11.0	4,139	--	85	.10	185	
	do.	do.	do.	--	--	June 1938	3.0	3,648	--	--	2.41	4,480	
	do.	do.	do.	--	--	Oct. 1943	5.0	3,606	--	--	.72	1,330	
	do.	do.	do.	--	--	Dec. 1946	3.0	3,352	--	--	.25	460	
	do.	do.	do.	--	--	Oct. 1951	5.0	3,297	--	85	.15	270	
	do.	do.	do.	--	--	Aug. 1953	2.2	3,313	--	85	3/--	3/--	
70-14a	Live Oak Dam	Live Oak Creek	LaVerne, Calif.	2.3	2.3	-- 1922 3/	--	267	--	--	--	--	CE
	do.	do.	do.	--	--	Mar. 1929	6.3	267	--	--	0	--	
	do.	do.	do.	--	--	Mar. 1936	7.0	262	--	--	.31	--	
	do.	do.	do.	--	--	May 1938	2.1	250	--	--	2.90	--	
	do.	do.	do.	--	--	Nov. 1952	14.5	221	--	--	.71	--	
	do.	do.	do.	--	--	Dec. 1961	9.0	170	--	--	2.46	--	
	do.	do.	do.	--	--	Dec. 1962	1.0	166	--	--	1.76	--	
	do.	do.	do.	--	--	Mar. 1967	4.3	4/221.8	1.33	--	2.83	--	
	do.	do.	do.	--	--	Jan. 1969	1.75	197.1	1.11	--	6.13	--	
	do.	do.	do.	--	--	Oct. 1970	1.75	251.1	1.13	--	5.70	--	
70-15	Morena	Cottonwood Creek	San Diego, Calif.	112.0	109.4	Mar. 1910	--	66,767	--	--	--	--	SCS
	do.	do.	do.	--	--	Dec. 1935	25.7	60,699	--	60	2.16	2,883	
	do.	do.	do.	--	--	July 1948	12.6	58,933	--	--	1.28	1,673	
70-16b	Prado Flood-Control Reservoir	Santa Ana River	Corona, Calif.	2,233	1,131	Sept. 1941	--	222,860	--	--	--	--	CE
	do.	do.	do.	--	--	Aug. 1960	18.9	216,960	--	--	.275	--	
70-17	Mockingbird Canyon 5/	Mockingbird Canyon	Arlington, Calif.	11.6	11.5	-- 1934	--	1,000	--	--	--	--	SCS
	do.	do.	do.	--	--	Mar. 1960	26	961	--	60	.130	170	
70-18a	Hansen Flood-Control Basin	Tujunga Creek	San Fernando, Calif.	147	146	Sept. 1940	--	35,800	2.06	--	--	--	CE
	do.	do.	do.	--	--	July 1941	.8	35,200	2.02	--	4.10	--	
	do.	do.	do.	--	--	Oct. 1943	2.3	34,100	1.96	--	3.78	--	
	do.	do.	do.	--	--	Nov. 1945	2.1	33,900	1.92	--	2.06	--	
	do.	do.	do.	--	--	Jan. 1962	16.2	33,265	1.91	--	.10	--	
	do.	do.	do.	--	--	Aug. 1969	7.58	29,700	1.71	--	3.22	--	
7-19	Brea F. C. Basin	Brea Creek	Fullerton, Calif.	23.4	23.1	Mar. 1962	--	4,160	3.97	--	--	--	CE
	do.	do.	do.	--	--	Oct. 1969	7.5	4,097	3.90	--	.41	--	
70-20a	Cogswell (San Gabriel Dam #2)	San Gabriel River	Azusa, Calif.	39.2	39.0	Apr. 1935	--	12,[illegible]	--	--	--	--	CE
	do.	do.	do.	--	--	Jan. 1936	.8	12,298	--	--	--	--	
	do.	do.	do.	--	--	Apr. 1938	2.2	10,786	--	--	17.6	--	
	do.	do.	do.	--	--	Nov. 1939	1.6	11,029	--	--	6/--	--	
	do.	do.	do.	--	--	Nov. 1940	1.0	11,102	--	--	6/--	--	
	do.	do.	do.	--	--	Nov. 1941	1.0	10,915	--	--	4.79	--	
	do.	do.	do.	--	--	Oct. 1943	1.9	10,901	--	--	5.59	--	
	do.	do.	do.	--	--	Jan. 1945	1.2	10,536	--	--	6/--	--	
	do.	do.	do.	--	--	Sept. 1946	1.7	10,597	--	--	6/--	--	
	do.	do.	do.	--	--	Sept. 1947	1.0	10,634	--	--	6/--	--	
	do.	do.	do.	--	--	Dec. 1957	10.2	10,585	--	--	.12	--	
	do.	do.	do.	--	--	Oct. 1958	.7	10,446	.612	--	2.68	--	
	do.	do.	do.	--	--	Nov. 1962	4.1	10,288	.643	--	1.6	--	
	do.	do.	do.	--	--	June 1966	3.7	9,999	.642	--	1.62	--	
	do.	do.	do.	--	--	Mar. 1969	2.75	9,339	.512	--	6.15	--	
70-21d	San Gabriel Dam No. 1	do.	do.	203	7/203	-- 1937	--	8/53,344	--	--	--	--	CE
	do.	do.	do.	--	--	Oct. 1938	.9	67,198	--	--	28.3	--	
	do.	do.	do.	--	--	Nov. 1940	2.1	66,335	--	--	1.68	--	
	do.	do.	do.	--	--	Sept. 1941	.8	65,862	--	--	--	--	
	do.	do.	do.	--	--	Oct. 1942	1.0	65,799	--	--	.63	--	
	do.	do.	do.	--	--	Sept. 1943	1.0	64,052	--	--	7.13	--	
	do.	do.	do.	--	--	Oct. 1944	1.1	64,388	--	--	--	--	
	do.	do.	do.	--	--	Nov. 1945	1.0	64,362	--	--	.19	--	
	do.	do.	do.	--	--	Nov. 1948	3.0	63,825	--	--	.97	--	
	do.	do.	do.	--	--	Nov. 1951	3.0	63,988	--	--	.23	--	
	do.	do.	do.	--	--	Jan. 1953	1.2	63,853	--	--	.96	--	

	do	do	do	--	--	May	1954	1.3	44,013	--	--	.127	--	
	do	do	do	--	--	Aug.	1958	4.3	44,616	--	--	.193	--	
	do	do	do	--	--	Sept.	1961	3.1	44,366	--	--	.329	--	
	do	do	do	--	--	Nov.	1962	1.2	43,642	.51	--	2.49	--	
	do	do	do	--	--	Dec.	1965	3.1	42,371	.49	--	2.02	--	
	do	do	do	--	--	Apr.	1966	.3	42,075	.51	--	--	--	
	do	do	do	--	--	Aug.	1967	1.3	40,697	.46	--	5.22	--	
	do	do	do	--	--	Feb.	1969	1.5	38,778	.45	--	8.86	--	
	do	do	do	--	--	May	1969	.25	36,748	.42	--	--	--	
	do	do	do	--	--	Oct.	1969	.42	37,822	.43	--	--	--	
	do	do	do	--	--	Oct.	1970	1.0	41,549	.48	--	--	--	
70-28b	Morris Reservoir	do	do	211.3	9/210.7	Jan.	1934	--	39,316	--	--	--	--	CE
	do	do	do	--	--	Jan.	1936	2.1	38,692	.45	--	1.41	--	
	do	do	do	--	--	Feb.	1938	2.1	37,175	.43	--	3.43	--	
	do	do	do	--	--	Oct.	1938	.7	36,655	.43	--	3.53	--	
	do	do	do	--	--	Dec.	1949	11.2	35,176	.41	--	.63	--	
	do	do	do	--	--	Sept.	1956	6.8	34,861	.41	--	.22	--	
	do	do	do	--	--	Nov.	1960	4.2	33,827	.40	--	1.17	--	
	do	do	do	--	--	Jan.	1967	6.2	32,961	.39	--	.66	--	
	do	do	do	--	--	Oct.	1970	3.8	30,085	.35	--	3.59	--	
70-29b	San Dimas F. C. Basin	San Dimas Wash	San Dimas, Calif.	16.2	16.1	Sept.	1922	--	4/1,496	--	--	--	--	CE
	do	do	do	--	--	Dec.	1935	13.2	1,373	--	--	.98	--	
	do	do	do	--	--	Oct.	1938	2.9	1,155	--	--	4.67	--	
	do	do	do	--	--	Nov.	1939	1.0	1,189	--	--	--	--	
	do	do	do	--	--	Dec.	1941	2.1	1,145	--	--	1.30	--	
	do	do	do	--	--	Oct.	1943	1.9	1,071	--	--	2.42	--	
	do	do	do	--	--	Nov.	1944	1.0	1,042	--	--	1.80	--	
	do	do	do	--	--	Oct.	1954	9.8	1,025	--	--	.11	--	
	do	do	do	--	--	Nov.	1961	7.1	705	.25	--	2.80	--	
	do	do	do	--	--	Apr.	1962	.4	729	.28	--	--	--	
	do	do	do	--	--	Aug.	1966	4.3	1,234	.69	--	16.0	--	
	do	do	do	--	--	Apr.	1967	.7	1,129	.25	--	--	--	
	do	do	do	--	--	Jan.	1969	1.75	847	.32	--	10.0	--	
	do	do	do	--	--	Feb.	1969	.08	756	.29	--	--	--	
	do	do	do	--	--	Nov.	1970	1.75	1,515	.67	--	1.12	--	
70-24c	Puddingstone Diversion Dam	do	do	19.9	10/19.7	Oct.	1929	--	4/148	.06	--	--	--	CE
	do	do	do	--	--	Jan.	1936	6.25	121	.05	--	1.66	--	
	do	do	do	--	--	Mar.	1938	2.17	50	.02	--	12.58	--	
	do	do	do	--	--	Nov.	1939	1.66	76	.03	--	--	--	
	do	do	do	--	--	Oct.	1942	2.92	101	.04	--	--	--	
	do	do	do	--	--	Sept.	1944	1.92	112	.05	--	--	--	
	do	do	do	--	--	Jan.	1952	7.33	119	.05	--	--	--	
	do	do	do	--	--	Sept.	1953	1.67	138	.06	--	--	--	
	do	do	do	--	--	Sept.	1962	9.0	303	.09	--	.28	--	
	do	do	do	--	--	May	1966	3.67	125	.05	--	1.07	--	
	do	do	do	--	--	Oct.	1967	1.41	200	.08	--	2.03	--	
	do	do	do	--	--	Jan.	1969	1.25	74	.03	--	5.13	--	
	do	do	do	--	--	Mar.	1969	.17	42	.02	--	--	--	
	do	do	do	--	--	Nov.	1970	1.66	156.3	.07	--	1.69	--	
70-25a	Puddingstone Dam F. C. Basin	Puddingstone Creek	do	32.2	11/11.0	--	1915	--	17,398	--	--	--	--	CE
	do	do	do	--	--	--	1927	0	17,398	--	--	--	--	
	do	do	do	--	--	Jan.	1941	13	17,190	--	--	1.45	--	
70-26c	Big Dalton F. C. Basin	Big Dalton Creek	Glendora, Calif.	4.5	4.5	Jan.	1930	--	4/1,196	--	--	--	--	CE
	do	do	do	--	--	Sept.	1931	1.7	1,039	--	--	20.26	--	
	do	do	do	--	--	Jan.	1935	3.3	1,053	--	--	--	--	
	do	do	do	--	--	Mar.	1938	3.1	969	--	--	6.02	--	
	do	do	do	--	--	Sept.	1943	5.5	953	--	--	.65	--	
	do	do	do	--	--	Oct.	1944	1.0	952	--	--	.22	--	
	do	do	do	--	--	Oct.	1958	14.0	951	--	--	.02	--	
	do	do	do	--	--	Nov.	1961	3.1	880	1.25	--	5.09	--	
	do	do	do	--	--	Jan.	1962	.2	869	1.24	--	--	--	
	do	do	do	--	--	Aug.	1966	4.7	752	1.14	--	5.53	--	
	do	do	do	--	--	Apr.	1967	.7	692	1.05	--	--	--	
	do	do	do	--	--	Jan.	1969	1.75	515	.78	--	.225	--	
	do	do	do	--	--	Mar.	1969	.17	452	.68	--	--	--	

1/ Based on runoff seasons.
2/ Not computed because of scour during period.
3/ Normal operation began 1922.
4/ Sediment removed at various times.
5/ Equalizing reservoir on Gage Canal System obtaining water from the Santa Ana River.
6/ No record of quantities sluiced.
7/ Includes San Gabriel Dams drainage area 39.2 sq. mi. as sediment is sluiced into San Gabriel Dam 1 drainage area.
8/ Storage capacity is regained by sluicing at various times.
9/ Includes Cogswell and San Gabriel Dam #1. (Drainage area 203 sq. mi.) Sediment sluiced into this area.
10/ Includes San Dimas drainage area (16.2 sq. mi.). Sediment sluiced into this area.
11/ 21.1 sq. mi. controlled by San Dimas, Live Oak Dam, and Puddingstone Diversion Dams.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY		PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET							AC.-FT.	TONS	
			SALTON SEA AND SOUTHERN CALIFORNIA COASTAL AND GREAT BASIN DRAINAGE (Continued)											
70-27c	Big Santa Anita F. C. Basin	Santa Anita Creek	Arcadia, Calif.	10.8	10.8	—	1923	—	1/1,376	—	—	—	—	CE
	do	do	do	—	—	Feb.	1935 2/	7.9	1,068	—	—	3.61	—	
	do	do	do	—	—	Feb.	1936	1.0	1,016	—	—	5.00	—	
	do	do	do	—	—	July	1938	2.4	688	—	—	12.6	—	
	do	do	do	—	—	Feb.	1940	1.6	710	—	—	7.18	—	
	do	do	do	—	—	Feb.	1942	2.0	701	—	—	1.43	—	
	do	do	do	—	—	Mar.	1943	1.1	568	—	—	11.2	—	
	do	do	do	—	—	Sept.	1943	.5	626	—	—	—	—	
	do	do	do	—	—	May	1944	.7	697	—	—	—	—	
	do	do	do	—	—	Jan.	1947	2.7	738	—	—	.44	—	
	do	do	do	—	—	Dec.	1952	5.9	738	—	—	.22	—	
	do	do	do	—	—	July	1954	1.6	586	—	—	9.15	—	
	do	do	do	—	—	Feb.	1956	1.5	613	—	—	1.30	—	
	do	do	do	—	—	Sept.	1958	2.6	597	—	—	.96	—	
	do	do	do	—	—	Apr.	1962	3.6	630	.16	—	3.31	—	
	do	do	do	—	—	Sept.	1966	4.4	552	.14	—	1.90	—	
	do	do	do	—	—	Oct.	1968	2.1	600	.14	—	3.09	—	
	do	do	do	—	—	Mar.	1969	.42	258	.06	—	—	—	
	do	do	do	—	—	Nov.	1970	1.67	836	.16	—	.96	—	
70-28c	Big Tujunga F. C. Basin	Big Tujunga Creek	Sunland, Calif.	82.3	82.2	—	1932	—	1/6,240	—	—	—	—	CE
	do	do	do	—	—	May	1938	6.9	4,736	—	—	2.65	—	
	do	do	do	—	—	Oct.	1939	1.5	4,688	—	—	2.00	—	
	do	do	do	—	—	Feb.	1940	.3	4,568	—	—	2.64	—	
	do	do	do	—	—	July	1941	1.5	4,425	—	—	7.33	—	
	do	do	do	—	—	Feb.	1943	1.5	4,063	—	—	3.10	—	
	do	do	do	—	—	Apr.	1943	.2	4,236	.28	—	—	—	
	do	do	do	—	—	June	1944	1.1	4,235	.28	—	2.19	—	
	do	do	do	—	—	Oct.	1953	9.3	4,099	.27	—	.18	—	
	do	do	do	—	—	June	1958	4.8	4,123	.27	—	.28	—	
	do	do	do	—	—	July	1962	4.1	4,065	.26	—	.60	—	
	do	do	do	—	—	Oct.	1966	4.25	3,819	.25	—	.71	—	
	do	do	do	—	—	Feb.	1969	2.33	2,798	.18	—	6.05	—	
	do	do	do	—	—	Oct.	1970	1.67	6,027	.39	—	—	—	
70-29b	Devil's Gate F. C. Basin	Arroyo Seco River	Pasadena, Calif.	31.9	31.7	—	1916	—	1/4,601	—	—	—	—	CE
	do	do	do	—	—	June	1933	13.0	4,556	—	—	.11	—	
	do	do	do	—	—	Sept.	1934	1.2	4,127	—	—	11.15	—	
	do	do	do	—	—	Jan.	1935	.3	3,996	—	—	13.69	—	
	do	do	do	—	—	June	1938	3.5	2,987	—	—	9.22	—	
	do	do	do	—	—	Jan.	1942	3.6	2,728	—	—	2.08	—	
	do	do	do	—	—	Jan.	1943	1.0	2,506	.38	—	5.02	—	
	do	do	do	—	—	Fall	1948	5.7	2,561	.39	—	1.25	—	
	do	do	do	—	—	July	1952	3.8	2,630	.40	—	1.06	—	
	do	do	do	—	—	Sept.	1955	3.3	2,709	.41	—	.98	—	
	do	do	do	—	—	Dec.	1959	4.2	2,839	.43	—	.63	—	
	do	do	do	—	—	May	1961	1.4	2,886	.44	—	4.07	—	
	do	do	do	—	—	May	1962	1.0	2,769	.42	—	9.59	—	
	do	do	do	—	—	Sept.	1966	4.3	2,598	.50	—	4.20	—	
	do	do	do	—	—	Nov.	1969	3.2	2,002	.30	—	7.32	—	
70-30d	Eaton Wash (Eaton Wash Dam)	Eaton Creek	do	9.5	9.4	—	1936	—	1/956	—	—	—	—	CE
	do	do	do	—	—	Feb.	1937	1.0	965	—	—	1.17	—	
	do	do	do	—	—	May	1938	1.3	698	—	—	20.2	—	
	do	do	do	—	—	Dec.	1938	.6	699	—	—	—	—	
	do	do	do	—	—	Oct.	1940	1.8	711	—	—	—	—	
	do	do	do	—	—	Aug.	1941	.8	661	—	—	—	—	
	do	do	do	—	—	Sept.	1942	1.1	728	—	—	—	—	
	do	do	do	—	—	Oct.	1943	1.1	632	.29	—	12.7	—	
	do	do	do	—	—	Oct.	1944	1.0	607	.27	—	2.7	—	
	do	do	do	—	—	Oct.	1946	2.0	676	.31	—	0	—	
	do	do	do	—	—	June	1947	.7	661	.30	—	2.0	—	
	do	do	do	—	—	June	1950	3.0	665	.30	—	0	—	
	do	do	do	—	—	Jan.	1952	1.6	703	.32	—	0.1	—	
	do	do	do	—	—	May	1957	5.3	655	.30	—	1.0	—	
	do	do	do	—	—	Nov.	1958	1.5	725	.33	—	.90	—	
	do	do	do	—	—	Sept.	1961	2.9	807	.37	—	2.48	—	
	do	do	do	—	—	Oct.	1963	2.0	808	.37	—	.53	—	
	do	do	do	—	—	Feb.	1964	.2	873.8	.40	—	—	—	
	do	do	do	—	—	Apr.	1966	2.2	769.7	.35	—	4.98	—	
	do	do	do	—	—	July	1967	1.3	738.4	.34	—	6.49	—	
	do	do	do	—	—	Dec.	1969	2.4	879	.40	—	11.3	—	

70-31c	Pacoima F. C. Basin	Pacoima Canyon	San Fernando, Calif.	28.2	28.2	Oct. 1929	--	1/6,060	--	--	--	--	CE
	do	do	do	--	--	Jan. 1936	6.3	5,592	--	--	2.63	--	
	do	do	do	--	--	Mar. 1938	2.2	5,004	--	--	9.47	--	
	do	do	do	--	--	Oct. 1942	4.6	4,837	--	--	1.29	--	
	do	do	do	--	--	Dec. 1944	2.1	4,714	--	--	2.86	--	
	do	do	do	--	--	Oct. 1954	9.8	4,707	--	--	.15	--	
	do	do	do	--	--	June 1958	3.8	4,651	--	--	2.97	--	
	do	do	do	--	--	May 1962	3.9	4,581	.83	--	.44	--	
	do	do	do	--	--	Aug. 1966	4.25	4,453	.81	--	1.08	--	
	do	do	do	--	--	Mar. 1969	2.58	3,841	.70	--	8.40	--	
70-32	Santiago	Santiago Creek	Villa Park, Calif.	63	62.1	Dec. 1931	--	25,000	1.619	--	--	--	CE
	do	do	do	--	--	Sept. 1948	16.8	24,840	1.609	--	.15	--	
70-33b	Sawpit F. C. Basin	Sawpit Creek	Monrovia, Calif.	3.3	3.3	-- 1923 3/	--	1/476	--	--	--	--	CE
	do	do	do	--	--	Oct. 1935	8.3	389	--	--	3.18	--	
	do	do	do	--	--	May 1938	2.6	380	--	--	8.03	--	
	do	do	do	--	--	May 1941	3.0	342	--	--	2.94	--	
	do	do	do	--	--	Dec. 1943	2.6	322	--	--	3.03	--	
	do	do	do	--	--	Mar. 1954	10.2	305	--	--	.51	--	
	do	do	do	--	--	Sept. 1959	5.5	289	--	--	3.03	--	
	do	do	do	--	--	May 1962	2.7	271.8	.52	--	1.91	--	
	do	do	do	--	--	Aug. 1964	2.2	308.5	.61	--	5.09	--	
	do	do	do	--	--	July 1966	1.9	284.3	.55	--	3.82	--	
	do	do	do	--	--	May 1967	.7	269.2	.48	--	--	--	
	do	do	do	--	--	Nov. 1969	2.7	391.0	.47	--	16.39	--	
70-34b	Sierra Madre Debris Dam	Little Santa Anita Creek	Sierra Madre, Calif.	2.39	2.39	Feb. 1928	--	1/50.3	--	--	--	--	CE
	do	do	do	--	--	Feb. 1930	2.0	50.3	--	--	--	--	
	do	do	do	--	--	Feb. 1932	2.0	47.4	--	--	.61	--	
	do	do	do	--	--	Nov. 1939	7.8	34.4	--	--	.70	--	
	do	do	do	--	--	Jan. 1944	4.1	44.3	--	--	--	--	
	do	do	do	--	--	Oct. 1944	.8	42.4	--	--	1.00	--	
	do	do	do	--	--	Oct. 1956	12.0	40.6	--	--	1.95	--	
	do	do	do	--	--	Sept. 1969	13.0	--	--	--	4/2.10	--	
	do	do	do	--	--	Sept. 1970	1.0	--	--	--	1.53	--	
70-35b	Thompson Creek F. C. Basin	Thompson Creek	Claremont, Calif.	3.5	3.5	-- 1916	--	1/692	3.51	--	--	--	CE
	do	do	do	--	--	Oct. 1932	5/4.6	643	3.26	--	3.04	--	
	do	do	do	--	--	Jan. 1943	10.3	612	3.11	--	.86	--	
	do	do	do	--	--	Sept. 1954	11.7	571	2.90	--	1.00	--	
	do	do	do	--	--	Jan. 1957	3.3	566	2.87	--	.86	--	
	do	do	do	--	--	June 1957	.4	570	2.89	--	--	--	
	do	do	do	--	--	Dec. 1959	1.5	578	2.93	--	--	--	
	do	do	do	--	--	July 1962	2.6	556	2.81	--	2.44	--	
	do	do	do	--	--	Feb. 1967	4.6	510	2.59	--	2.73	--	
	do	do	do	--	--	Feb. 1969	2.0	448	2.27	--	8.93	--	
70-36c	Wilbur Ave. Debris Basin	Aliso Creek	Northridge, Calif.	8.63	8.63	June 1942	--	1/--	--	--	4/--	--	CE
	do	do	do	--	--	Sept. 1943	1.33	--	--	--	2.37	--	
	do	do	do	--	--	Sept. 1944	1	--	--	--	2.72	--	
	do	do	do	--	--	Sept. 1947	3.0	--	--	--	.85	--	
	do	do	do	--	--	Sept. 1950	3.0	--	--	--	.25	--	
	do	do	do	--	--	Sept. 1952	2	--	--	--	2.09	--	
	do	do	do	--	--	Sept. 1957	5	--	--	--	.47	--	
	do	do	do	--	--	Sept. 1960	3	--	--	--	.90	--	
	do	do	do	--	--	Sept. 1962	2	--	--	--	1.29	--	
	do	do	do	--	--	Sept. 1965	3	--	--	--	.41	--	
	do	do	do	--	--	Sept. 1966	1	--	--	--	3.99	--	
	do	do	do	--	--	Sept. 1967	1	--	--	--	2.35	--	
	do	do	do	--	--	Sept. 1968	1	--	--	--	2.17	--	
	do	do	do	--	--	Sept. 1969	1	--	--	--	2.72	--	
70-37b	Altadena Debris Basin	Rubio Wash	Altadena, Calif.	.65	.65	Sept. 1947	1	1/--	--	--	4/1.34	--	CE
	do	do	do	--	--	Sept. 1948	1	--	--	--	1.92	--	
	do	do	do	--	--	Sept. 1949	1	--	--	--	1.35	--	
	do	do	do	--	--	Sept. 1950	1	--	--	--	1.58	--	
	do	do	do	--	--	Mar. 1952	1.5	--	--	--	1.75	--	
	do	do	do	--	--	Feb. 1956	3.9	--	--	--	1.11	--	
	do	do	do	--	--	Sept. 1957	1.6	--	--	--	1.23	--	
	do	do	do	--	--	Apr. 1958	.6	--	--	--	8.97	--	
	do	do	do	--	--	Sept. 1959	1.4	--	--	--	2.57	--	

1/ Sediment is removed at various times by sluicing and/or excavation.
2/ Date normal operation began - Mar. 1927.
3/ Date normal operation began - June 1927.
4/ Sedimentation values as computed by Los Angeles County FCD are based on complete water year.
5/ Storage and surface area assumed same at time of initial normal operations, Mar. 1928 as in 1916 survey.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES) TOTAL	DRAINAGE AREA (SQUARE MILES) NET	DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN AC.-FT.	TONS	AGENCY SUPPLYING DATA
				SALTON SEA AND SOUTHERN CALIFORNIA COASTAL AND GREAT BASIN DRAINAGE (Continued)									
70-38e	Bailey Debris Dam	Bailey Channel	Sierra Madre, Calif.	0.60	0.60	Sept. 1946	1	1/—	—	—	2/0.64	—	CE
	do	do	do	—	—	Sept. 1947	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1948	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1949	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1950	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1952	2	—	—	—	.18	—	
	do	do	do	—	—	Sept. 1957	4.9	—	—	—	2.80	—	
	do	do	do	—	—	Sept. 1962	5.0	—	—	—	8.03	—	
	do	do	do	—	—	Sept. 1968	6.0	—	—	—	.05	—	
	do	do	do	—	—	Sept. 1970	2.0	—	—	—	2.37	—	
70-39e	Brand Debris Basin	Brand Canyon Channel	La Canada, Calif.	1.03	1.03	Sept. 1936	5	1/—	—	—	2/.30	—	CE
	do	do	do	—	—	Sept. 1937	1	—	—	—	.43	—	
	do	do	do	—	—	Sept. 1938	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1939	1	—	—	—	1.06	—	
	do	do	do	—	—	Sept. 1940	1	—	—	—	.19	—	
	do	do	do	—	—	Sept. 1941	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1942	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1943	1	—	—	—	.09	—	
	do	do	do	—	—	Sept. 1944	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1945	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1946	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1948	2	—	—	—	1.79	—	
	do	do	do	—	—	Sept. 1960	12	—	—	—	1.17	—	
	do	do	do	—	—	Sept. 1961	1	—	—	—	27.06	—	
	do	do	do	—	—	Sept. 1970	9	—	—	—	2.07	—	
70-40e	Haines Debris Basin	Haines Canyon Channel	Tujunga, Calif.	.84	.84	Sept. 1936	1	1/—	—	—	2/.69	—	CE
	do	do	do	—	—	Sept. 1938	2	—	—	—	39.0	—	
	do	do	do	—	—	Sept. 1940	2	—	—	—	6.14	—	
	do	do	do	—	—	Sept. 1941	1	—	—	—	8.76	—	
	do	do	do	—	—	Sept. 1942	1	—	—	—	.27	—	
	do	do	do	—	—	Sept. 1943	1	—	—	—	10.3	—	
	do	do	do	—	—	Sept. 1944	1	—	—	—	2.57	—	
	do	do	do	—	—	Sept. 1945	1	—	—	—	.36	—	
	do	do	do	—	—	Sept. 1946	1	—	—	—	3.13	—	
	do	do	do	—	—	Sept. 1947	1	—	—	—	1.15	—	
	do	do	do	—	—	Sept. 1948	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1949	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1950	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1952	2	—	—	—	4.07	—	
	do	do	do	—	—	Sept. 1954	2	—	—	—	.36	—	
	do	do	do	—	—	Sept. 1959	5	—	—	—	3.17	—	
	do	do	do	—	—	Sept. 1970	11	—	—	—	1.90	—	
70-41e	Eagle Debris Basin	Eagle Canyon	La Crescenta, Calif.	.41	.41	Sept. 1938	2	1/—	—	—	2/21.2	—	CE
	do	do	do	—	—	Sept. 1939	1	—	—	—	11.7	—	
	do	do	do	—	—	Sept. 1941	2	—	—	—	7.03	—	
	do	do	do	—	—	Sept. 1942	1	—	—	—	.24	—	
	do	do	do	—	—	Sept. 1943	1	—	—	—	13.7	—	
	do	do	do	—	—	Sept. 1944	1	—	—	—	4.99	—	
	do	do	do	—	—	Sept. 1945	1	—	—	—	1.11	—	
	do	do	do	—	—	Sept. 1946	1	—	—	—	.97	—	
	do	do	do	—	—	Sept. 1947	1	—	—	—	.41	—	
	do	do	do	—	—	Sept. 1948	1	—	—	—	.07	—	
	do	do	do	—	—	Sept. 1949	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1950	1	—	—	—	0	—	
	do	do	do	—	—	Sept. 1952	2	—	—	—	2.44	—	
	do	do	do	—	—	Aug. 1956	3.9	—	—	—	.80	—	
	do	do	do	—	—	Sept. 1960	4.1	—	—	—	1.47	—	
	do	do	do	—	—	Sept. 1961	1	—	—	—	2.55	—	
	do	do	do	—	—	Sept. 1966	5	—	—	—	3.30	—	
	do	do	do	—	—	Sept. 1970	4	—	—	—	5.97	—	
70-42e	Fair Oaks Debris Basin	Fair Oaks Canyon	Altadena, Calif.	.21	.21	Sept. 1936	1	1/—	—	—	2/84.4	—	CE
	do	do	do	—	—	Sept. 1938	2	—	—	—	47.4	—	
	do	do	do	—	—	Sept. 1941	3	—	—	—	3.9	—	
	do	do	do	—	—	Sept. 1943	2	—	—	—	4.3	—	
	do	do	do	—	—	Sept. 1944	1	—	—	—	.84	—	
	do	do	do	—	—	Sept. 1945	1	—	—	—	1.71	—	
	do	do	do	—	—	Sept. 1946	1	—	—	—	2.04	—	
	do	do	do	—	—	Sept. 1947	1	—	—	—	1.95	—	

	--do--	--do--	--do--	--	--	Sept. 1948	1	--	--	--	.019	--	
	--do--	--do--	--do--	--	--	Sept. 1949	1	--	--	--	0	--	
	--do--	--do--	--do--	--	--	Sept. 1950	1	--	--	--	0	--	
	--do--	--do--	--do--	--	--	Sept. 1952	2	--	--	--	4.57	--	
	--do--	--do--	--do--	--	--	Oct. 1956	4.1	--	--	--	.14	--	
	--do--	--do--	--do--	--	--	June 1958	1.7	--	--	--	19.05	--	
	--do--	--do--	--do--	--	--	Sept. 1963	5.2	--	--	--	4.76	--	
	--do--	--do--	--do--	--	--	Sept. 1966	3	--	--	--	10.14	--	
	--do--	--do--	--do--	--	--	Sept. 1968	2	--	--	--	3.10	--	
	--do--	--do--	--do--	--	--	Sept. 1969	1	--	--	--	46.9	--	
70-43b	Fern Debris Basin	Fern Canyon	--do--	.30	.30	Sept. 1936	1	1/--	--	--	2/31.2	--	CE
	--do--	--do--	--do--	--	--	Sept. 1938	2	--	--	--	41.3	--	
	--do--	--do--	--do--	--	--	Sept. 1941	3	--	--	--	3.30	--	
	--do--	--do--	--do--	--	--	Sept. 1942	1	--	--	--	0	--	
	--do--	--do--	--do--	--	--	Sept. 1943	1	--	--	--	22.0	--	
	--do--	--do--	--do--	--	--	Sept. 1944	1	--	--	--	6.17	--	
	--do--	--do--	--do--	--	--	Sept. 1945	1	--	--	--	3.07	--	
	--do--	--do--	--do--	--	--	Sept. 1946	1	--	--	--	2.77	--	
	--do--	--do--	--do--	--	--	Sept. 1947	1	--	--	--	.43	--	
	--do--	--do--	--do--	--	--	Sept. 1948	1	--	--	--	0	--	
	--do--	--do--	--do--	--	--	Sept. 1949	1	--	--	--	0	--	
	--do--	--do--	--do--	--	--	Sept. 1950	1	--	--	--	0	--	
	--do--	--do--	--do--	--	--	Sept. 1952	2	--	--	--	5.47	--	
	--do--	--do--	--do--	--	--	Sept. 1964	12	--	--	--	1.23	--	
	--do--	--do--	--do--	--	--	Sept. 1966	2	--	--	--	16.67	--	
	--do--	--do--	--do--	--	--	Sept. 1968	2	--	--	--	11.5	--	
	--do--	--do--	--do--	--	--	Sept. 1969	1	--	--	--	24.6	--	
70-44c	Gould Debris Basin	Gould Canyon Channel	La Canada, Calif.	.47	.47	Sept. 1948	1	1/--	--	--	2/0	--	CE
	--do--	--do--	--do--	--	--	Sept. 1950	2	--	--	--	0	--	
	--do--	--do--	--do--	--	--	Sept. 1952	2	--	--	--	5.32	--	
	--do--	--do--	--do--	--	--	June 1958	5.8	--	--	--	3.29	--	
	--do--	--do--	--do--	--	--	Sept. 1962	4.2	--	--	--	5.83	--	
	--do--	--do--	--do--	--	--	Sept. 1966	4.0	--	--	--	9.06	--	
	--do--	--do--	--do--	--	--	Sept. 1968	2	--	--	--	1.98	--	
	--do--	--do--	--do--	--	--	Sept. 1969	1	--	--	--	28.7	--	
70-45a	Haines Debris Basin	Haines Canyon	Tujunga, Calif.	1.53	1.53	Sept. 1938	3	1/--	--	--	2/6.93	--	CE
	--do--	--do--	--do--	--	--	Sept. 1940	2	--	--	--	8.38	--	
	--do--	--do--	--do--	--	--	Sept. 1941	1	--	--	--	5.09	--	
	--do--	--do--	--do--	--	--	Sept. 1943	2	--	--	--	4.22	--	
	--do--	--do--	--do--	--	--	Sept. 1944	1	--	--	--	3.58	--	
	--do--	--do--	--do--	--	--	Sept. 1945	1	--	--	--	2.59	--	
	--do--	--do--	--do--	--	--	Sept. 1946	1	--	--	--	0	--	
	--do--	--do--	--do--	--	--	Sept. 1947	1	--	--	--	.37	--	
	--do--	--do--	--do--	--	--	Sept. 1948	1	--	--	--	0	--	
	--do--	--do--	--do--	--	--	Sept. 1949	1	--	--	--	0	--	
	--do--	--do--	--do--	--	--	Sept. 1950	1	--	--	--	0	--	
	--do--	--do--	--do--	--	--	May 1952	1.6	--	--	--	1.57	--	
70-46a	Hall's Debris Basin	Hall - Beckley Canyon	La Canada, Calif.	3/.84	.84	Sept. 1936	1	1/--	--	--	2/17.2	--	CE
	--do--	--do--	--do--	--	--	Sept. 1937	1	--	--	--	13.7	--	
	--do--	--do--	--do--	--	--	Sept. 1938	1	--	--	--	75.4	--	
	--do--	--do--	--do--	--	--	Sept. 1941	3	--	--	--	12.0	--	
	--do--	--do--	--do--	--	--	Sept. 1943	2	--	--	--	17.9	--	
	--do--	--do--	--do--	--	--	Sept. 1944	1	--	--	--	6.10	--	
	--do--	--do--	--do--	3/1.06	1.06	Sept. 1945	1	--	--	--	2.97	--	
	--do--	--do--	--do--	--	--	Sept. 1946	1	--	--	--	1.00	--	
	--do--	--do--	--do--	--	--	Sept. 1947	1	--	--	--	2.60	--	
	--do--	--do--	--do--	--	--	Sept. 1948	1	--	--	--	--	--	
	--do--	--do--	--do--	--	--	Sept. 1949	1	--	--	--	--	--	
	--do--	--do--	--do--	--	--	Sept. 1950	1	--	--	--	--	--	
	--do--	--do--	--do--	--	--	Sept. 1952	2	--	--	--	6.40	--	
	--do--	--do--	--do--	--	--	Feb. 1957	4.4	--	--	--	.14	--	
	--do--	--do--	--do--	--	--	Sept. 1959	2.6	--	--	--	11.05	--	
	--do--	--do--	--do--	--	--	Sept. 1962	3	--	--	--	.063	--	
	--do--	--do--	--do--	--	--	Sept. 1964	2	--	--	--	4.48	--	
	--do--	--do--	--do--	--	--	Sept. 1968	4	--	--	--	3.49	--	
	--do--	--do--	--do--	--	--	Sept. 1969	1	--	--	--	34.4	--	

1/ Capacity of debris basin varies. Debris excavated at various times.
2/ Sedimentation values as computed by LACFCD are based on complete water year.

3/ Drainage area 0.84 sq. mi. to 1945; 1.0659 sq. mi. beginning 1945.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	SALTON SEA AND SOUTHERN CALIFORNIA COASTAL AND GREAT BASIN DRAINAGE (Continued)												
70-47a	May Debris Basin	May Canyon Channel	La Canada, Calif.	0.20	0.20	Sept. 1938	2	1/—	—	—	2/20.3	—	CE
	do.	do.	do.	—	—	Sept. 1939	1	—	—	—	6.30	—	
	do.	do.	do.	—	—	Sept. 1940	1	—	—	—	.33	—	
	do.	do.	do.	—	—	Sept. 1941	1	—	—	—	1.90	—	
	do.	do.	do.	—	—	Sept. 1943	2	—	—	—	4.75	—	
	do.	do.	do.	—	—	Sept. 1944	1	—	—	—	.65	—	
	do.	do.	do.	—	—	Sept. 1945	1	—	—	—	1.93	—	
	do.	do.	do.	—	—	Sept. 1946	1	—	—	—	0	—	
	do.	do.	do.	—	—	Sept. 1947	1	—	—	—	0	—	
	do.	do.	do.	—	—	Sept. 1948	1	—	—	—	0	—	
	do.	do.	do.	—	—	Sept. 1949	1	—	—	—	0	—	
	do.	do.	do.	—	—	Sept. 1950	1	—	—	—	0	—	
	do.	do.	do.	—	—	Sept. 1952	2	—	—	—	2.30	—	
	do.	do.	do.	—	—	Sept. 1961	9	—	—	—	3.38	—	
	do.	do.	do.	—	—	Sept. 1964	3	—	—	—	5.95	—	
	do.	do.	do.	—	—	Sept. 1968	4	—	—	—	1.25	—	
	do.	do.	do.	—	—	Sept. 1970	2	—	—	—	11.5	—	
70-48a	Las Flores Debris Basin	Las Flores Channel	Altadena, Calif.	.65	.65	Sept. 1936	1	1/—	—	—	2/14.7	—	CE
	do.	do.	do.	—	—	Sept. 1938	2	—	—	—	30.2	—	
	do.	do.	do.	—	—	Sept. 1939	1	—	—	—	1.33	—	
	do.	do.	do.	—	—	Sept. 1943	4	—	—	—	4.60	—	
	do.	do.	do.	—	—	Sept. 1944	1	—	—	—	3.71	—	
	do.	do.	do.	—	—	Sept. 1945	1	—	—	—	.93	—	
	do.	do.	do.	—	—	Sept. 1946	1	—	—	—	.95	—	
	do.	do.	do.	—	—	Sept. 1947	1	—	—	—	.67	—	
	do.	do.	do.	—	—	Sept. 1948	1	—	—	—	0	—	
	do.	do.	do.	—	—	Sept. 1949	1	—	—	—	0	—	
	do.	do.	do.	—	—	Sept. 1950	1	—	—	—	0	—	
	do.	do.	do.	—	—	Sept. 1952	2	—	—	—	1.39	—	
	do.	do.	do.	—	—	Sept. 1963	11	—	—	—	4.00	—	
	do.	do.	do.	—	—	Sept. 1966	3	—	—	—	8.60	—	
	do.	do.	do.	—	—	Sept. 1969	3	—	—	—	13.0	—	
70-49a	Lincoln Debris Basin	Lincoln Canyon	do.	.50	.50	Sept. 1936	1	1/—	—	—	2/9.86	—	CE
	do.	do.	do.	—	—	Sept. 1938	2	—	—	—	17.4	—	
	do.	do.	do.	—	—	Sept. 1940	2	—	—	—	.99	—	
	do.	do.	do.	—	—	Sept. 1941	1	—	—	—	15.1	—	
	do.	do.	do.	—	—	Sept. 1943	2	—	—	—	6.40	—	
	do.	do.	do.	—	—	Sept. 1944	1	—	—	—	2.32	—	
	do.	do.	do.	—	—	Sept. 1945	1	—	—	—	.38	—	
	do.	do.	do.	—	—	Sept. 1946	1	—	—	—	0	—	
	do.	do.	do.	—	—	Sept. 1947	1	—	—	—	2.80	—	
	do.	do.	do.	—	—	Sept. 1948	1	—	—	—	—	—	
	do.	do.	do.	—	—	Sept. 1949	1	—	—	—	—	—	
	do.	do.	do.	—	—	Sept. 1950	1	—	—	—	—	—	
	do.	do.	do.	—	—	May 1952	1.6	—	—	—	1.83	—	
	do.	do.	do.	—	—	Sept. 1961	9.3	—	—	—	.10	—	
	do.	do.	do.	—	—	Sept. 1967	6	—	—	—	1.76	—	
	do.	do.	do.	—	—	Sept. 1969	2	—	—	—	1.85	—	
70-50a	Nichols Debris Basin	Nichols Canyon	Hollywood, Calif.	.94	.94	Sept. 1942	5	1/—	—	—	2/3.18	—	CE
	do.	do.	do.	—	—	Sept. 1943	1	—	—	—	1.98	—	
	do.	do.	do.	—	—	Sept. 1944	1	—	—	—	.69	—	
	do.	do.	do.	—	—	Sept. 1945	1	—	—	—	.80	—	
	do.	do.	do.	—	—	Sept. 1946	1	—	—	—	.15	—	
	do.	do.	do.	—	—	Sept. 1947	1	—	—	—	3.72	—	
	do.	do.	do.	—	—	Sept. 1948	1	—	—	—	.49	—	
	do.	do.	do.	—	—	Sept. 1949	1	—	—	—	.38	—	
	do.	do.	do.	—	—	Sept. 1950	1	—	—	—	.60	—	
	do.	do.	do.	—	—	May 1952	1.6	—	—	—	2.62	—	
	do.	do.	do.	—	—	Feb. 1954	1.8	—	—	—	.47	—	
	do.	do.	do.	—	—	Sept. 1955	1.6	—	—	—	1.39	—	
	do.	do.	do.	—	—	Sept. 1956	1	—	—	—	3.29	—	
	do.	do.	do.	—	—	Sept. 1962	6	—	—	—	1.68	—	
	do.	do.	do.	—	—	Sept. 1968	2	—	—	—	2.13	—	
	do.	do.	do.	—	—	Sept. 1970	2	—	—	—	2.77	—	

70-51b	Paradise Debris Basin	Paradise Canyon	La Canada, Calif.	.96	.96	Sept. 1945	1	1/--	--	--	2/1.18	--	CE
	do	do	do	--	--	Sept. 1946	1	--	--	--	.92	--	
	do	do	do	--	--	Sept. 1947	1	--	--	--	1.00	--	
	do	do	do	--	--	Sept. 1948	1	--	--	--	.14	--	
	do	do	do	--	--	Sept. 1949	1	--	--	--	.10	--	
	do	do	do	--	--	Sept. 1950	1	--	--	--	0	--	
	do	do	do	.58	.58	Apr 1952	1.4	--	--	--	5.38	--	
	do	do	do	--	--	Mar. 1956	3.9	--	--	--	.98	--	
70-52a	Pickens Debris Basin	Pickens Canyon	La Crescenta, Calif.	1.84	1.84	Sept. 1936	1	1/--	--	--	2/11.0	--	CE
	do	do	do	--	--	Sept. 1937	1	--	--	--	6.89	--	
	do	do	do	--	--	Sept. 1938	1	--	--	--	44.9	--	
	do	do	do	--	--	Sept. 1939	1	--	--	--	2.95	--	
	do	do	do	--	--	Sept. 1940	1	--	--	--	4.75	--	
	do	do	do	--	--	Sept. 1941	1	--	--	--	11.6	--	
	do	do	do	--	--	Sept. 1943	2	--	--	--	9.03	--	
	do	do	do	--	--	Sept. 1944	1	--	--	--	3.00	--	
	do	do	do	--	--	Sept. 1945	1	--	--	--	.51	--	
	do	do	do	--	--	Sept. 1946	1	--	--	--	.23	--	
	do	do	do	--	--	Sept. 1947	1	--	--	--	.37	--	
	do	do	do	--	--	Sept. 1948	1	--	--	--	.15	--	
	do	do	do	--	--	Sept. 1949	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1950	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1952	2	--	--	--	2.25	--	
	do	do	do	--	--	Sept. 1959	7	--	--	--	2.81	--	
	do	do	do	--	--	Sept. 1966	7	--	--	--	3.41	--	
	do	do	do	--	--	Sept. 1970	4	--	--	--	4.46	--	
70-53e	Rubio Debris Dam	Rubio Wash	Altadena, Calif.	1.3	1.3	Sept. 1966	3	1/--	--	--	2/.69	--	CE
	do	do	do	--	--	Sept. 1947	1	--	--	--	.32	--	
	do	do	do	--	--	Sept. 1948	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1949	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1950	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1952	2	--	--	--	1.23	--	
	do	do	do	--	--	Apr. 1957	4.7	--	--	--	.09	--	
	do	do	do	--	--	Sept. 1966	9.4	--	--	--	2.07	--	
	do	do	do	--	--	Sept. 1969	3	--	--	--	10.0	--	
70-54b	Scholl Debris Basin	Scholl Canyon	Glendale, Calif.	.66	.66	Sept. 1947	2	1/--	--	--	2/.32	--	CE
	do	do	do	--	--	Sept. 1948	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1949	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1950	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1952	2	--	--	--	1.65	--	
	do	do	do	--	--	Sept. 1961	9	--	--	--	.53	--	
	do	do	do	--	--	Sept. 1970	9	--	--	--	.88	--	
70-55a	Shields Debris Basin	Shields Channel	La Crescenta, Calif.	.27	.27	Sept. 1938	1	1/--	--	--	2/77.0	--	CE
	do	do	do	--	--	Sept. 1939	1	--	--	--	10.1	--	
	do	do	do	--	--	Sept. 1941	2	--	--	--	10.9	--	
	do	do	do	--	--	Sept. 1943	2	--	--	--	5.85	--	
	do	do	do	--	--	Sept. 1944	1	--	--	--	2.33	--	
	do	do	do	--	--	Sept. 1945	1	--	--	--	.52	--	
	do	do	do	--	--	Sept. 1946	1	--	--	--	1.04	--	
	do	do	do	--	--	Sept. 1947	1	--	--	--	.04	--	
	do	do	do	--	--	Sept. 1948	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1949	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1950	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1952	1.5	--	--	--	10.9	--	
	do	do	do	--	--	Sept. 1961	9.5	--	--	--	2.07	--	
	do	do	do	--	--	Sept. 1966	5	--	--	--	6.81	--	
70-56a	Snover Debris Basin	Snover Canyon	do	.23	.23	Sept. 1938	2	1/--	--	--	2/22.6	--	CE
	do	do	do	--	--	Sept. 1939	1	--	--	--	57.0	--	
	do	do	do	--	--	Sept. 1941	2	--	--	--	4.4	--	
	do	do	do	--	--	Sept. 1943	2	--	--	--	8.30	--	
	do	do	do	--	--	Sept. 1945	2	--	--	--	.65	--	
	do	do	do	--	--	Sept. 1952	7	--	--	--	1.09	--	
	do	do	do	--	--	Sept. 1961	9	--	--	--	.06	--	
	do	do	do	--	--	Sept. 1968	7	--	--	--	3.30	--	
	do	do	do	--	--	Sept. 1969	1	--	--	--	56.5	--	
70-57b	Sparr Debris Basin	Sparr Channel	Montrose, Calif.	.84	.84	Sept. 1947	.6	1/--	--	--	2/0	--	CE
	do	do	do	--	--	Sept. 1948	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1949	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1950	1	--	--	--	0	--	
	do	do	do	--	--	Mar. 1952	1.5	--	--	--	3.56	--	
	do	do	do	--	--	Feb. 1956	3.9	--	--	--	1.13	--	
70-58b	Stough Debris Basin	Stough Canyon Channel	Burbank, Calif.	1.65	1.65	Sept. 1943	3	1/--	--	--	2/4.22	--	CE
	do	do	do	--	--	Sept. 1944	1	--	--	--	2.84	--	
	do	do	do	--	--	Sept. 1945	1	--	--	--	1.76	--	
	do	do	do	--	--	Sept. 1946	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1947	1	--	--	--	0	--	
	do	do	do	--	--	Sept. 1950	3	--	--	--	0	--	
	do	do	do	--	--	Apr. 1952	1.6	--	--	--	2.73	--	
	do	do	do	--	--	Sept. 1958	6.4	--	--	--	.37	--	
	do	do	do	--	--	Sept. 1960	2.0	--	--	--	.75	--	

1/ Capacity of debris basin varies. Debris excavated at various times.

2/ Sedimentation values as computed by LACFCD are based on complete water year.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	SALTON SEA AND SOUTHERN CALIFORNIA COASTAL AND GREAT BASIN DRAINAGE (Continued)												
70-59a	Sunset Canyon Debris Dam (upper)	Sunset Canyon Channel	Burbank, Calif.	0.44	0.44	Sept. 1942	13	1/—	—	—	2/1.34	—	CE
	◆	◆	◆	—	—	Sept. 1944	2	—	—	—	.04	—	
	◆	◆	◆	—	—	Sept. 1945	1	—	—	—	.18	—	
	◆	◆	◆	—	—	Sept. 1946	1	—	—	—	.20	—	
	◆	◆	◆	—	—	Sept. 1950	4	—	—	—	0	—	
	◆	◆	◆	—	—	Sept. 1952	2	—	—	—	2.41	—	
	◆	◆	◆	—	—	Sept. 1959	7	—	—	—	1.68	—	
	◆	◆	◆	—	—	Sept. 1966	7	—	—	—	7.80	—	
	◆	◆	◆	—	—	Sept. 1969	3	—	—	—	6.20	—	
70-60	Vanalden Debris Basin	Vanalden Channel	Encino, Calif.	1.08	1.08	Sept. 1966	1	1/—	—	—	2/.32	—	CE
	◆	◆	◆	—	—	Sept. 1967	1	—	—	—	.02	—	
	◆	◆	◆	—	—	Sept. 1970	3	—	—	—	—	—	
70-61a	Verdugo Debris Basin	Verdugo Wash	Montrose, Calif.	15.5	10.0	Sept. 1938	3.58	1/—	—	—	2/1.83	—	CE
	◆	◆	◆	—	—	Sept. 1941	3	—	—	—	.81	—	
	◆	◆	◆	—	—	Sept. 1943	2	—	—	—	2.05	—	
	◆	◆	◆	—	—	Sept. 1944	1	—	—	—	4.27	—	
	◆	◆	◆	—	—	Sept. 1950	6	—	—	—	.06	—	
	◆	◆	◆	—	—	Sept. 1952	2	—	—	—	.82	—	
	◆	◆	◆	—	—	Sept. 1953	1	—	—	—	3.73	—	
	◆	◆	◆	—	—	May 1956	2.67	—	—	—	.002	—	
	◆	◆	◆	—	—	Jan. 1959	2.67	—	—	—	.09	—	
	◆	◆	◆	—	—	Sept. 1960	1.66	—	—	—	.05	—	
	◆	◆	◆	—	—	Sept. 1964	4	—	—	—	.51	—	
	◆	◆	◆	—	—	Sept. 1966	2	—	—	—	1.71	—	
	◆	◆	◆	—	—	Sept. 1968	2	—	—	—	.05	—	
	◆	◆	◆	—	—	Sept. 1970	2	—	—	—	3.14	—	
70-62b	Ward Debris Basin (Lower)	Ward Canyon	La Crescenta, Calif.	1/.44	1/.44	Sept. 1965	1	1/—	—	—	2/.51	—	CE
	◆	◆	◆	—	—	Sept. 1966	1	—	—	—	1.63	—	
	◆	◆	◆	—	—	Sept. 1967	1	—	—	—	4.86	—	
	◆	◆	◆	—	—	Sept. 1968	1	—	—	—	1.00	—	
	◆	◆	◆	—	—	Sept. 1969	1	—	—	—	.36	—	
	◆	◆	◆	—	—	Sept. 1970	1	—	—	—	1.11	—	
	◆	◆	◆	—	—	Feb. 1952	1.3	—	—	—	4.41	—	
	◆	◆	◆	—	—	Apr. 1952	.2	—	—	—	—	—	
	◆	◆	◆	—	—	Sept. 1956	4.4	—	—	—	.52	—	
	◆	◆	◆	—	—	Sept. 1958	2.0	—	—	—	.70	—	
70-63b	West Ravine Debris Basin	West Ravine Canyon	Altadena, Calif.	.25	.25	Sept. 1936	1	1/—	—	—	2/47.85	—	CE
	◆	◆	◆	—	—	Sept. 1937	1	—	—	—	45.42	—	
	◆	◆	◆	—	—	Sept. 1938	1	—	—	—	73.85	—	
	◆	◆	◆	—	—	Sept. 1940	2	—	—	—	3.40	—	
	◆	◆	◆	—	—	Sept. 1941	1	—	—	—	21.4	—	
	◆	◆	◆	—	—	Sept. 1942	1	—	—	—	.44	—	
	◆	◆	◆	—	—	Sept. 1943	1	—	—	—	20.20	—	
	◆	◆	◆	—	—	Sept. 1944	1	—	—	—	8.03	—	
	◆	◆	◆	—	—	Sept. 1945	1	—	—	—	.80	—	
	◆	◆	◆	—	—	Sept. 1946	1	—	—	—	1.36	—	
	◆	◆	◆	—	—	Sept. 1947	1	—	—	—	1.52	—	
	◆	◆	◆	—	—	Sept. 1948	1	—	—	—	.02	—	
	◆	◆	◆	—	—	Sept. 1949	1	—	—	—	0	—	
	◆	◆	◆	—	—	Sept. 1950	1	—	—	—	0	—	
	◆	◆	◆	—	—	Sept. 1952	2	—	—	—	4.78	—	
	◆	◆	◆	—	—	Sept. 1964	12	—	—	—	1.08	—	
	◆	◆	◆	—	—	Sept. 1968	4	—	—	—	8.49	—	
	◆	◆	◆	—	—	Sept. 1969	1	—	—	—	43.2	—	
70-64	Camp Marston	Dehr Creek	Julian, Calif.	1.6	1.59	— 1918	—	44.1	—	—	—	—	SCS
	◆	◆	◆	—	—	Sept. 1951	33	36.9	—	60	.14	183.0	
70-65b	Cooks Canyon Debris Basin	Cooks Canyon	La Crescenta, Calif.	.58	.58	Mar. 1952	.2	1/—	—	—	—	—	CE
	◆	◆	◆	—	—	Sept. 1961	9.5	—	—	—	2/.280	—	
	◆	◆	◆	—	—	Sept. 1969	8	—	—	—	.028	—	
70-66	Auburn Debris Basin	Auburn River	Sierra Madre, Calif.	.19	.19	Dec. 1954	—	1/—	—	—	—	—	CE
	◆	◆	◆	—	—	Sept. 1959	4.8	—	—	—	2.6	—	
70-67a	Bradbury Debris Basin	Bradbury Canyon	Monrovia, Calif.	.68	.68	Jan. 1955	—	1/—	—	—	—	—	CE
	◆	◆	◆	—	—	Sept. 1959	4.67	—	—	—	2/8.15	—	
	◆	◆	◆	—	—	Sept. 1961	2.0	—	—	—	1.62	—	
	◆	◆	◆	—	—	Sept. 1966	5	—	—	—	6.65	—	
	◆	◆	◆	—	—	Sept. 1969	3	—	—	—	23.5	—	

70-68a	Carter Debris Basin	Carter Canyon	Sierra Madre, Calif.	.12	.12	Dec. 1954	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	4.8	—	—	—	2/2.8	—	
	do.	do.	do.	—	—	Sept. 1962	3	—	—	—	23.7	—	
	do.	do.	do.	—	—	Sept. 1969	7	—	—	—	4.06	—	
70-69a	Bear Debris Basin	Bear Canyon	Glendale, Calif.	.59	.59	Jan. 1955	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	4.83	—	—	—	2/.55	—	
	do.	do.	do.	—	—	Sept. 1964	5	—	—	—	2.10	—	
	do.	do.	do.	—	—	Sept. 1965	1	—	—	—	26.76	—	
	do.	do.	do.	—	—	Sept. 1966	1	—	—	—	21.19	—	
	do.	do.	do.	—	—	Sept. 1969	3	—	—	—	19.0	—	
70-70	Floral (Upper) Debris Basin	Floral Canyon	Sierra Madre, Calif.	.06	.06	Mar. 1954	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	5.6	—	—	—	2.4	—	
70-71	La Tuna Debris Basin	La Tuna Canyon	Los Angeles, Calif.	5.34	5.34	Jan. 1956	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Feb. 1956	.1	—	—	—	—	—	
	do.	do.	do.	—	—	July 1957	1.4	—	—	—	2/.04	—	
	do.	do.	do.	—	—	Sept. 1958	1.2	—	—	—	.13	—	
	do.	do.	do.	—	—	Sept. 1959	1.0	—	—	—	2.15	—	
	do.	do.	do.	—	—	Sept. 1960	1.0	—	—	—	1.22	—	
70-72a	Lannan Debris Basin	Lannan Wash	Sierra Madre, Calif.	.25	.25	Mar. 1954	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	5.6	—	—	—	2/3.44	—	
	do.	do.	do.	—	—	Sept. 1962	3	—	—	—	11.3	—	
	do.	do.	do.	—	—	Sept. 1967	5	—	—	—	.48	—	
	do.	do.	do.	—	—	Sept. 1970	3	—	—	—	20.4	—	
70-73b	Maddock Debris Basin	Maddock Canyon	Duarte, Calif.	.25	.25	Jan. 1955	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Mar. 1956	1.2	—	—	—	2/17.8	—	
	do.	do.	do.	—	—	Sept. 1959	3.5	—	—	—	3.83	—	
	do.	do.	do.	—	—	Sept. 1967	8.0	—	—	—	1.8	—	
	do.	do.	do.	—	—	Sept. 1969	2	—	—	—	15.8	—	
	do.	do.	do.	—	—	Sept. 1970	1	—	—	—	2.96	—	
70-74a	May No. 1 Debris Basin	May Canyon	San Fernando, Calif.	.70	.70	Aug. 1953	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	6.2	—	—	—	2/.78	—	
	do.	do.	do.	—	—	Sept. 1967	8	—	—	—	7.20	—	
	do.	do.	do.	—	—	Sept. 1968	1	—	—	—	23.3	—	
	do.	do.	do.	—	—	Sept. 1969	1	—	—	—	104.0	—	
70-75c	May No. 2 Debris Basin	do.	do.	.09	.09	Aug. 1953	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	6.2	—	—	—	2/.36	—	
	do.	do.	do.	—	—	Sept. 1967	8	—	—	—	11.9	—	
	do.	do.	do.	—	—	Sept. 1968	1	—	—	—	65.5	—	
	do.	do.	do.	—	—	Sept. 1969	1	—	—	—	28.9	—	
70-76a	McClure Debris Basin	McClure Canyon	Burbank, Calif.	.62	.62	Dec. 1953	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	5.8	—	—	—	2/6.6	—	
	do.	do.	do.	—	—	Sept. 1961	2.0	—	—	—	9.27	—	
	do.	do.	do.	—	—	Sept. 1965	4	—	—	—	2.9	—	
	do.	do.	do.	—	—	Sept. 1966	1	—	—	—	10.0	—	
	do.	do.	do.	—	—	Sept. 1967	1	—	—	—	9.52	—	
70-77	Rowley Debris Basin	Rowley Canyon	Tujunga, Calif.	.58	.58	Jan. 1956	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	3.67	—	—	—	2/.62	—	
	do.	do.	do.	—	—	Sept. 1968	9	—	—	—	1.5	—	
	do.	do.	do.	—	—	Sept. 1969	1	—	—	—	11.8	—	
70-78	Ruby - Upper Debris Basin	Ruby Canyon	Sierra Madre, Calif.	.21	.21	Jan. 1954	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	5.6	—	—	—	2/5.2	—	
	do.	do.	do.	—	—	Sept. 1961	2.0	—	—	—	.29	—	
70-79a	Ruby - Lower Debris Basin	do.	do.	.10	.10	Dec. 1955	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	3.8	—	—	—	2/2.9	—	
	do.	do.	do.	—	—	Sept. 1962	3	—	—	—	1.0	—	
	do.	do.	do.	—	—	Sept. 1969	7	—	—	—	12.8	—	
70-80a	Sawpit Debris Dam	Sawpit Creek	Monrovia, Calif.	6.34	2.04	Jan. 1955	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	4.67	—	—	—	2/4.6	—	
	do.	do.	do.	—	—	Sept. 1962	3	—	—	—	6.9	—	
	do.	do.	do.	—	—	Sept. 1969	7	—	—	—	9.82	—	
70-81a	Sierra Madre Villa Debris Basin.	Sierra Madre Villa Canyon	Sierra Madre, Calif.	1.46	1.46	May 1958	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	1.4	—	—	—	2/.34	—	
	do.	do.	do.	—	—	Sept. 1962	3	—	—	—	16.92	—	
	do.	do.	do.	—	—	Sept. 1968	6	—	—	—	.18	—	
	do.	do.	do.	—	—	Sept. 1970	2	—	—	—	45.89	—	
70-82a	Spinks Debris Basin	Spinks Canyon	Monrovia, Calif.	.44	.44	Dec. 1958	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	.8	—	—	—	2/—	—	
	do.	do.	do.	—	—	Sept. 1962	3	—	—	—	1.66	—	
	do.	do.	do.	—	—	Sept. 1969	7	—	—	—	5.32	—	
70-83a	Turnbull Debris Basin	Turnbull Canyon Wash	Whittier, Calif.	.99	.99	Jan. 1953	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	6.8	—	—	—	2/.28	—	
	do.	do.	do.	—	—	Sept. 1968	9	—	—	—	1.33	—	
	do.	do.	do.	—	—	Sept. 1969	1	—	—	—	16.0	—	
70-84a	Zachau Debris Basin	Zachau Canyon	Tujunga, Calif.	.35	.35	Aug. 1956	—	1/—	—	—	—	—	CE
	do.	do.	do.	—	—	Sept. 1959	3.2	—	—	—	2/.80	—	
	do.	do.	do.	—	—	Sept. 1961	2.0	—	—	—	.80	—	
	do.	do.	do.	—	—	Sept. 1969	8	—	—	—	2.37	—	

1/ Capacity of debris basin varies. Debris excavated at various times.
2/ Sedimentation values computed by Los Angeles County FCD are based on complete wateryear.

3/ Drainage area 0.35 sq. mi. through 1947; 0.64 after 1947.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	SALTON SEA AND SOUTHERN CALIFORNIA COASTAL AND GREAT BASIN DRAINAGE (Continued)												
70-85a	Ward Debris Basin (Upper)	Ward Canyon	La Crescenta, Calif.	0.10	0.10	Nov. 1956	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1957	.8	—	—	—	2/30.1	—	
	do	do	do	—	—	Sept. 1958	1.0	—	—	—	39.3	—	
	do	do	do	—	—	Sept. 1959	1.0	—	—	—	17.5	—	
	do	do	do	—	—	Sept. 1967	8	—	—	—	.4	—	
	do	do	do	—	—	Sept. 1968	1	—	—	—	3.1	—	
	do	do	do	—	—	Sept. 1969	1	—	—	—	22.9	—	
70-86	Sepulveda Flood Control Basin	Los Angeles River	Van Nuys, Calif.	152	142	Nov. 1941	—	16,720	1.00	—	—	—	CE
	do	do	do	—	—	Nov. 1944	3.0	17,437	1.04	—	—	—	
	do	do	do	—	—	June 1961	16.6	17,296	1.03	—	.06	—	
70-87a	Santa Fe Flood Control Basin	San Gabriel River	Baldwin Park, Calif.	236.0	3/20.54	Apr. 1943	—	36,670	—	—	—	—	CE
	do	do	do	—	—	Nov. 1949	6.6	36,276	—	—	2.91	—	
	do	do	do	—	—	Mar. 1959	9.3	33,987	—	—	1.51	—	
	do	do	do	—	—	June 1961	2.2	33,385	—	—	13.32	—	
	do	do	do	—	—	Feb. 1967	5.7	32,716	—	—	5.72	—	
	do	do	do	—	—	Sept. 1968	1.6	1/34,916	—	—	—	—	
	do	do	do	—	—	Aug. 1969	.9	32,642	—	—	123.0	—	
70-88a	Bell IV (OSO4)	Bell Creek	Glendora, Calif.	.061	.061	Jan. 1966	—	2.30	.234	—	—	—	FS
	do	do	do	—	—	Dec. 1966	.96	—	—	—	1.16	—	
	do	do	do	—	—	Oct. 1968	1.86	—	—	—	0	—	
	do	do	do	—	—	Mar. 1969	.43	—	—	—	39.6	—	
	do	do	do	—	—	July 1970	1.41	—	—	—	.018	—	
70-89	Bell Debris Basin	do	Canoga Park, Calif.	7.0	7.0	— —	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1970	3	—	—	—	2/.71	—	
70-90	Carbon Canyon F. C. Basin	Carbon Canyon Creek	Brea, Calif.	19.3	19.3	Mar. 1961	—	7,033	10.0	—	—	—	CE
	do	do	do	—	—	Sept. 1969	8.5	6,615	9.45	—	2.54	—	
70-91	Childs Debris Basin	Childs Canyon	Glendale, Calif.	.31	.31	Sept. 1963	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1966	3	—	—	—	2/8.61	—	
70-92	Elmwood Debris Basin	Elmwood Canyon	Burbank, Calif.	.31	.31	— 1964	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1968	4	—	—	—	2/7.90	—	
	do	do	do	—	—	Sept. 1970	2	—	—	—	.10	—	
70-93	Eaglewild Debris Basin	Eaglewild Canyon	Glendora, Calif.	.4	.4	Sept. 1961	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1969	8	—	—	—	2/10.4	—	
	do	do	do	—	—	Sept. 1970	1	—	—	—	13.5	—	
70-94	Harrow Debris Basin	Harrow Canyon	Glendora, Calif.	.43	.43	Sept. 1958	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1969	11	—	—	—	2/6.77	—	
	do	do	do	—	—	Sept. 1970	1	—	—	—	16.3	—	
70-95	Hook East Debris Basin	Hook Canyon	Azusa, Calif.	.18	.18	Sept. 1967	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1969	2	—	—	—	2/66.7	—	
	do	do	do	—	—	Sept. 1970	1	—	—	—	2.78	—	
70-96	Kinneloa Debris Basin	Kinneloa Canyon	Pasadena, Calif.	.20	.20	Oct. 1964	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1966	1.92	—	—	—	2/10.50	—	
	do	do	do	—	—	Sept. 1969	3	—	—	—	21.65	—	
	do	do	do	—	—	Sept. 1970	1	—	—	—	12.70	—	
70-97	Kinneloa - West Debris Basin	do	Altadena, Calif.	.16	.16	Sept. 1966	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1969	3	—	—	—	2/30.8	—	
	do	do	do	—	—	Sept. 1970	1	—	—	—	19.6	—	
70-98	Little Dalton Debris Basin	Little Dalton	Glendora, Calif.	3.3	3.3	Feb. 1960	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1962	2.6	—	—	—	2/15.9	—	
	do	do	do	—	—	Sept. 1969	7	—	—	—	12.4	—	
70-99	Morgan Debris Basin	Morgan Canyon	do	.6	.6	Sept. 1964	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1969	5	—	—	—	2/2.95	—	
70-100	San Antonio F. C. Basin	San Antonio Creek	Claremont, Calif.	26.7	26.7	Aug. 1956	—	9,295	.90	—	—	—	CE
	do	do	do	—	—	July 1969	12.91	6,718	.65	—	7.45	—	
70-101	Schoolhouse Debris Basin	Mansfield Av. Storm Drain	Olive View, Calif.	.28	.28	June 1963	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1967	4.2	—	—	—	2/11.1	—	
70-102	Sunset Debris Basin (Lower)	Sunset Canyon	Glendale, Calif.	.65	.65	Jan. 1965	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1967	2.7	—	—	—	2/5.58	—	
70-103	Santa Anita Debris Basin	Santa Anita Creek	Arcadia, Calif.	1.7	1.7	Dec. 1959	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1962	2.8	—	—	—	2/19.1	—	
	do	do	do	—	—	Sept. 1968	6	—	—	—	.67	—	
	do	do	do	—	—	Sept. 1970	2	—	—	—	50.0	—	
70-104	Wilson Debris Basin	Wilson Canyon	Olive View, Calif.	2.58	2.58	June 1963	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept. 1967	4.2	—	—	—	2/5.23	—	

70-105	Wildwood Debris Basin	Wildwood Creek	Newhall, Calif.	.65	.65	Sept.	1967	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept.	1969	2	—	—	—	2/9.85	—	
70-106	Winery Debris Basin	Winery Canyon	La Crescenta, Calif.	.18	.18	Sept.	1968	—	1/—	—	—	—	—	CE
	do	do	do	—	—	Sept.	1969	1	—	—	—	2/28.2	—	
SAN JOAQUIN AND KERN RIVER BASINS AND ADJACENT COASTAL DRAINAGE														
71-1	Upper Crystal Springs	Laguna Creek	San Francisco, Calif.	13.3	12.0	Jan.	1878	—	29,130	12.67	—	—	—	SCS
	do	do	do	—	—	Oct.	1935	57.8	28,199	12.24	—	1.41	—	
71-2	Atascadero Park Lake	Atascadero Creek	Atascadero, Calif.	1.0	1.0	—	1918	—	150	—	—	—	—	SCS
	do	do	do	—	—	Nov.	1967	29	136	—	*40	.48	627	
71-3	Haskins	N. Fk. Los Viboras Creek	Hollister, Calif.	4.04	4.01	—	1912	—	549	—	—	—	—	SCS
	do	do	do	—	—	May	1960	28	4/532	—	*40	4/.15	196	
71-4a	Salinas	Salinas River	Santa Margarita, Calif.	111	110	—	1942	—	26,000	—	—	—	—	SCS
	do	do	do	—	—	Nov.	1947	6	25,860	—	—	.21	—	
	do	do	do	—	—	Aug.	1953	6	25,590	—	40	.41	357	
71-5	Copperopolis	Penney Creek	Copperopolis, Calif.	2.06	2.01	—	1915	—	265	—	—	—	—	SCS
	do	do	do	—	—	Aug.	1945	30	263	—	55	.034	40.7	
71-6	Crane Valley	N. Fk. San Joaquin River	Madera, Calif.	54.5	52.7	—	1901	—	45,410	—	—	—	—	SCS
	do	do	do	—	—	June	1946	45	45,028	—	*62	.161	217	
71-7	Davis	Shaw Creek	Stockton, Calif.	7.87	7.62	—	1917	—	1,421	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1945	28	1,367	—	63	.251	344	
71-8	Don Pedro	Tuolumne River	Modesto, Calif.	1,001	996.5	Mar.	1923	—	289,000	—	—	—	—	SCS
	do	do	do	—	—	Nov.	1945	22.7	284,266	—	*62	.218	286	
71-9	Exchequer	Merced River	Merced, Calif.	1,027	1,022.4	Sept.	1926	—	289,000	—	—	—	—	SCS
	do	do	do	—	—	Mar.	1946	19.6	285,646	—	62	.167	226	
71-10	Gilmore	Trib. of Mormon Slough	Bellota, Calif.	5.01	4.92	Sept.	1917	—	579	—	—	—	—	SCS
	do	do	do	—	—	Aug.	1945	28	560	—	50	.132	144	
71-11	Hume	Ten Mile Creek	Fresno, Calif.	24.2	24.1	June	1909	—	1,410	—	—	—	—	SCS
	do	do	do	—	—	June	1946	37.0	1,383	—	*62	.090	40.5	
71-12	La Grange	Tuolumne River	Modesto, Calif.	1,501	5/1,501	Sept.	1895	—	2,332	—	—	—	—	SCS
	do	do	do	—	—	Oct.	1905	10.1	1,068	—	*70	.083	127	
71-13	Lyons	S. Fk. Stanislaus River	Tuolumne, Calif.	6/40.0	39.7	June	1950	—	5,900	—	—	—	—	SCS
	do	do	do	—	—	June	1966	16	5,436	—	*70	.101	154	
71-14	McCarty	Trib. of Johnny Creek	San Andreas, Calif.	.35	.32	Dec.	1937	—	96.3	—	—	—	—	SCS
	do	do	do	—	—	Sept.	1945	7.7	95.5	—	*45	.300	294	
71-15	Pardee	Mokelumne River	Lodi, Calif.	7/387	383.5	—	1929	—	210,000	—	—	—	—	SCS
	do	do	do	—	—	Aug.	1943	14	209,183	—	*62	.152	205	
71-16	Salt Springs Valley	Rock Creek	San Andreas, Calif.	20.3	18.4	—	1882	—	12,930	—	—	—	—	SCS
	do	do	do	—	—	July	1945	63	12,697	—	*50	.201	219	
71-17	(Upper) Bear River	Bear River	Placerville, Calif.	28.1	28.2	Sept.	1900	—	6,712	—	—	—	—	SCS
	do	do	do	—	—	June	1946	45.8	6,690	—	*70	.027	26	
71-18a	Woods Pond	Sycamore Creek	Danville, Calif.	.30	.30	—	1940	—	4.41	—	—	—	—	SCS
	do	do	do	—	—	—	1951	11	4.23	—	80	.053	92.3	
71-19	St. Mary's	Walnut Creek	Walnut Creek, Calif.	3.11	2.97	—	1928	—	134.01	—	—	—	—	SCS
	do	do	do	—	—	—	1951	23	88.59	—	45	.66	647	
71-20	Black Hills	Green Valley Creek	Danville, Calif.	.76	.76	—	1880	—	32.68	—	—	—	—	SCS
	do	do	do	—	—	—	1951	71	27.04	—	46	.11	110.2	
71-21	Lakewood	Walnut Creek	Concord, Calif.	.75	.74	—	1911	—	27.08	—	—	—	—	SCS
	do	do	do	—	—	—	1951	40	24.86	—	30	.076	49.66	
71-22	Contra Costa Country Club	Grayson Creek	Pacheco, Calif.	.20	.20	—	1934	—	5.75	—	—	—	—	SCS
	do	do	do	—	—	—	1951	17	5.24	—	40	.15	131	
71-23	Englehart Pond	Marsh Creek	Brentwood, Calif.	.033	.033	—	1946	—	1.34	—	—	—	—	SCS
	do	do	do	—	—	Jan.	1953	7	1.32	—	*50	.088	115	
71-24a	C. C. Anderson Pond	do	do	.083	.083	—	1945	—	1.920	—	—	—	—	SCS
	do	do	do	—	—	Oct.	1952	7	1.864	—	*65	8/.096	8/136	
71-25	Upper Walter Keller Pond	do	do	.027	.027	—	1943	—	1.347	—	—	—	—	SCS
	do	do	do	—	—	Oct.	1952	9	1.185	—	*40	8/.682	8/594	
71-26	F. J. Hoey Pond	Alhambra Creek	do	.045	.045	—	1948	—	2.45	—	—	—	—	SCS
	do	do	do	—	—	Jan.	1953	5	2.32	—	*55	8/.578	8/692.38	
71-27a	Los Higgins Pond	Marsh Creek	do	.202	.199	—	1941	—	12.60	—	—	—	—	SCS
	do	do	do	—	—	Oct.	1953	12	12.28	—	*40	.14	122	
71-28a	Souza	do	do	.319	.283	—	1947	—	176.49	—	—	—	—	SCS
	do	do	do	—	—	Jan.	1953	6	174.97	—	*30	.096	986	
71-29a	Ordway	do	do	.619	.613	—	1946	—	60.9	—	—	—	—	SCS
	do	do	do	—	—	Jan.	1953	7	60.07	—	*70	.19	290	
71-30	North Fork	Pacheco Creek	Hollister, Calif.	66.2	66.0	—	1938	—	5,803	—	—	—	—	SCS
	do	do	do	—	—	Apr.	1951	12.4	5,706	—	*45	8/.12	8/117.61	

1/ Capacity of debris basin varies. Debris excavated at various times.
2/ Sedimentation values as computed by Los Angeles County FCD are based on complete water year.
3/ Excludes drainage area above Morris Dam (215.46 sq. mi.).
4/ Some sediment sluiced out incidental to work on outlet.
5/ Before construction of Don Pedro Reservoir in 1923.
6/ Excluding drainage area of Strawberry Reservoir.
7/ Excluding noncontributing areas above Salt Springs and Bear River Reservoirs.
8/ Excluding pond area.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

SAN JOAQUIN AND KERN RIVER BASINS AND ADJACENT COASTAL DRAINAGE (Continued)

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE -FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
71-31a	Teakettle Reservoir No. 1	Teakettle Creek	Fresno, Calif.	0.77	0.77	Fall 1938	--	0.39	--	--	--	--	FS
	do	do	do	--	--	Fall 1948	10.0	.18	--	--	0.0271	--	
	do	do	do	--	--	Fall 1951	3.0	.002	--	--	.1100	--	
	do	do	do	--	--	Fall 1955	4.0	0	--	--	.0078	--	
	do	do	do	--	--	Fall 1956	--	1/.352	--	--	--	--	
	do	do	do	--	--	Fall 1957	1.0	--	--	--	--	--	
	do	do	do	--	--	Fall 1958	1.0	--	--	--	.0591	--	
	do	do	do	--	--	Fall 1959	1.0	--	--	--	0	--	
	do	do	do	--	--	Fall 1960	1.0	--	--	--	.0158	--	
	do	do	do	--	--	Fall 1961	1.0	--	--	--	0	--	
	do	do	do	--	--	Fall 1962	1.0	--	--	--	.0065	--	
	do	do	do	--	--	Fall 1963	1.0	--	--	--	.3228	--	
	do	do	do	--	--	Fall 1964	1.0	--	--	--	.0089	--	
	do	do	do	--	--	Fall 1965	1.0	--	--	--	.0054	--	
71-32a	Teakettle Reservoir No. 2a	do	do	.273	.273	Fall 1938	--	.079	--	--	--	--	FS
	do	do	do	--	--	Fall 1941	3.0	.068	--	--	.0146	--	
	do	do	do	--	--	Fall 1948	7.0	.050	--	--	.0084	--	
	do	do	do	--	--	Fall 1951	3.0	.030	--	--	.0280	--	
	do	do	do	--	--	Fall 1955	4.0	.015	--	--	.0110	--	
	do	do	do	--	--	Fall 1956	1.0	2/.066	--	--	--	--	
	do	do	do	--	--	Fall 1957	1.0	--	--	--	--	--	
	do	do	do	--	--	Fall 1958	1.0	--	--	--	.0261	--	
	do	do	do	--	--	Fall 1959	1.0	--	--	--	.0099	--	
	do	do	do	--	--	Fall 1960	1.0	--	--	--	0	--	
	do	do	do	--	--	Fall 1961	1.0	--	--	--	0	--	
	do	do	do	--	--	Fall 1962	1.0	--	--	--	.0003	--	
	do	do	do	--	--	Fall 1963	1.0	--	--	--	.0462	--	
	do	do	do	--	--	Fall 1964	1.0	--	--	--	.0572	--	
	do	do	do	--	--	Fall 1965	1.0	--	--	--	0	--	
71-33a	Teakettle Reservoir No. 2	do	do	.847	.847	Fall 1938	--	.134	--	--	--	--	FS
	do	do	do	--	--	Fall 1948	10.0	.078	--	--	.0066	--	
	do	do	do	--	--	Fall 1951	3.0	.021	--	--	.0290	--	
	do	do	do	--	--	Fall 1955	4.0	.0022	--	--	.0080	--	
	do	do	do	--	--	Fall 1956	--	2/.101	--	--	--	--	
	do	do	do	--	--	Fall 1957	1.0	--	--	--	--	--	
	do	do	do	--	--	Fall 1958	1.0	--	--	--	.0166	--	
	do	do	do	--	--	Fall 1959	1.0	--	--	--	0	--	
	do	do	do	--	--	Fall 1960	1.0	--	--	--	.0032	--	
	do	do	do	--	--	Fall 1961	1.0	--	--	--	.0032	--	
	do	do	do	--	--	Fall 1962	1.0	--	--	--	.0015	--	
	do	do	do	--	--	Fall 1963	1.0	--	--	--	.0474	--	
	do	do	do	--	--	Fall 1964	1.0	--	--	--	0	--	
	do	do	do	--	--	Fall 1965	1.0	--	--	--	--	--	
71-34a	Teakettle Reservoir No. 3	do	do	.856	.856	Fall 1938	--	.131	--	--	--	--	FS
	do	do	do	--	--	Fall 1940	2.0	.127	--	--	.0096	--	
	do	do	do	--	--	Fall 1941	1.0	.109	--	--	.0204	--	
	do	do	do	--	--	Fall 1948	7.0	.040	--	--	.0112	--	
	do	do	do	--	--	Fall 1951 3/	3.0	.007	--	--	.0160	--	
	do	do	do	--	--	Fall 1956	--	2/.117	--	--	--	--	
	do	do	do	--	--	Fall 1957	1.0	--	--	--	--	--	
	do	do	do	--	--	Fall 1958	1.0	--	--	--	.0073	--	
	do	do	do	--	--	Fall 1959	1.0	--	--	--	.0042	--	
	do	do	do	--	--	Fall 1960	1.0	--	--	--	.0003	--	
	do	do	do	--	--	Fall 1961	1.0	--	--	--	0	--	
	do	do	do	--	--	Fall 1962	1.0	--	--	--	.0049	--	
	do	do	do	--	--	Fall 1963	1.0	--	--	--	.1457	--	
	do	do	do	--	--	Fall 1964	1.0	--	--	--	.0619	--	
	do	do	do	--	--	Fall 1965	1.0	--	--	--	.0338	--	
71-35	Teakettle No. 7	do	do	.091	.091	Fall 1956	(1938-56)	.222	.159	--	--	--	FS
	do	do	do	--	--	Fall 1957	19.0	.181	.129	--	.029	--	
	do	do	do	--	--	Fall 1958	1.0	.178	.127	--	4/-.013	--	
	do	do	do	--	--	Fall 1959	1.0	.182	.130	--	4/-.057	--	
	do	do	do	--	--	Fall 1960	1.0	.178	.127	--	.069	--	

71-36	Pine Flat	Kings River	Sanger, Calif.	1,542	1,542	May	1952	--	1,013,400	.612	--	--	--	CE
	do	do	do	--	--	Feb.	1954	5/1.8	1,013,290	.612	*62	.04	54	
	do	do	do	--	--	Nov.	1956	6/3	1,011,950	.611	*62	.29	392	
71-37	Salinas Boys Ranch	Trib. of Natividad Creek	Salinas, Calif.	.13	.13	Oct.	1953 7/	--	7/9.65	--	--	--	--	SCS
	do	do	do	--	--	Sept.	1964	11	9.34	--	*65	.23	325.6	
71-38	Roy Alexander	do	do	.205	.203	--	1951 8/	--	8/8.40	--	--	--	--	SCS
	do	do	do	--	--	Sept.	1964	13	8.15	--	*65	.10	141.6	
71-39	Gibralter	Santa Ines	Santa Barbara, Calif.	216	9/202.2	Oct.	1919	--	15,296	.42	--	--	--	GS
	do	do	do	--	--	Aug.	1923	3.83	13,674	.38	--	1.96	--	
	do	do	do	--	--	Aug.	1944	21	7,720	.21	--	9/1.47	--	
	do	do	do	--	--	Feb.	1956	11.42	14,777	.41	--	.43	--	
	do	do	do	--	--	Aug.	1969	13.5	9,654	.27	--	1.88	--	
71-40	Santa Felicia	Piru Creek	Piru, Calif.	425	425	Oct.	1955	--	101,200	--	--	--	--	GS
	do	do	do	--	--	Oct.	1965	10	98,730	--	52	.58	658	
71-41	Success Lake	Tule River	Porterville, Calif.	393	393	Sept.	1960	--	*86,160	.681	--	--	--	CE
	do	do	do	--	--	Nov.	1965	5.2	86,160	.681	--	*0	*0	
	do	do	do	--	--	Nov.	1967	2.0	83,610	.660	*62	3.244	4,383	
	do	do	do	--	--	Dec.	1968	1.1	83,680	.661	*62	-.163	-218.7	
71-42	Isabella Reservoir	Kern River	Isabella, Calif.	2,074	2,074	June	1953	--	539,665	.81	--	--	--	CE
	do	do	do	--	--	Sept.	1956	3.3	539,115	.81	*62	.074	100	
	do	do	do	--	--	Dec.	1968	12.2	534,465	.803	*62	.186	252	
71-43	Lake Kaweah (Terminus Dam)	Kaweah River	Lemon Cove, Calif.	560	560	Nov.	1961	--	149,599	.389	--	--	--	CE
	do	do	do	--	--	Nov.	1967	6	147,099	.382	*62	.745	1,006	
71-44	Cachuma	Santa Ynes River	Santa Ynes, Calif.	417	196	Jan.	1953	--	204,874	--	--	--	--	BR
	do	do	do	--	--	Aug.	1969	16.58	10/192,574	--	--	10/3.79	--	

SACRAMENTO, EEL AND RUSSIAN RIVER BASINS

72-1a	Ridgewood (Walker)	Walker Creek	Willits, Calif.	5.7	5.6	--	1930	--	313	.10	--	--	--	SCS
	do	do	do	--	--	June	1966	36	216	.07	77.5	.48	1,063	
72-2a	Morris	Davis Creek	do	5.1	5.03	--	1924	--	*320	.12	--	--	--	SCS
	do	do	do	--	--	--	1927	3	*775	.29	--	--	--	
	do	do	do	--	--	May	1960	36	660	.24	*50	.63	686	
	do	do	do	--	--	May	1966	6	643	.24	50.3	.56	642	
72-3	Big Canyon	Big Canyon Creek	French Town, Calif.	5.50	5.48	Nov.	1934	--	200	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1945	11	196	--	44.7	.069	67.2	
72-4	Blodgett	Trib. of Cosumnes River	Sacramento, Calif.	3.12	3.05	Mar.	1940	--	258	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1945	5.6	254	--	46	.217	217	
72-5	Bullards Bar	North Yuba River	Camptonville, Calif.	480	479	Oct.	1919	--	31,500	--	--	--	--	SCS
	do	do	do	--	--	Jan.	1939	19.2	28,893	--	*70	.284	433	
72-6	Combie (Van Geisen)	Bear River	Auburn, Calif.	130	129	June	1928	--	8,545	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1935	7.3	7,840	--	*70	.749	1,140	
72-7b	East Park	Little Stony Creek	Stonyford, Calif.	11/102.5	98.9	Dec.	1910	--	12/50,900	--	--	--	--	GS
	do	do	do	--	--	Nov.	1962	52	48,940	.80	55	13/.37	13/443	
72-8	Faulke Lake (False Lake)	N. Fk. Jenney Creek	Shasta, Calif.	.71	.68	--	1851	--	130	--	--	--	--	SCS
	do	do	do	--	--	Dec.	1945	94	120	--	54	.147	173	
72-9	Gerber	Trib. of Burch Creek	Corning, Calif.	.31	.28	June	1917	--	190	--	--	--	--	SCS
	do	do	do	--	--	Dec.	1945	28.5	182	--	78.3	.971	1,656	
72-10	Magalia	Little Butte Creek	Chico, Calif.	14/8.23	8.08	Jan.	1918	--	3,718	--	--	--	--	SCS
	do	do	do	--	--	Jan.	1946	28	3,648	--	48.8	.307	326	
72-11b	Stony Gorge	Stony Creek	Elk Creek, Calif.	15/199	197	Nov.	1928	--	16/50,000	--	--	--	--	GS
	do	do	do	--	--	Nov.	1962	34.1	48,160	.29	54	13/.27	13/319	
72-12	Misselbeck	N. Fk. Cottonwood Creek	Redding, Calif.	12.0	11.8	May	1920	--	4,300	--	--	--	--	SCS
	do	do	do	--	--	Dec.	1945	25.5	4,086	--	*75	.711	1,161	
72-13	Lake Pillsbury (Scott Dam)	Eel River	Potter Valley, Calif.	283	284	Dec.	1921	--	94,396	.248	--	--	--	GS
	do	do	do	--	--	May	1959	37.5	86,785	.228	73	.71	1,129	
72-14	Catacoula (Bar 49)	Maxewell Creek	St. Helena, Calif.	.71	.69	--	1953	--	183.0	--	--	--	--	SCS
	do	do	do	--	--	Nov.	1958	5	181.4	--	--	.46	--	
72-15	Milliken	Milliken Creek	Napa, Calif.	10.5	10.4	--	1924	--	2,000	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1958	34	1,988	--	--	.04	--	
72-16a	Onion Creek No. 1	Onion Creek, trib. of Amer. River.	Soda Springs, Calif.	.19	.19	--	1957	--	.114	.039	--	--	--	FS
	do	do	do	--	--	--	1958	1.0	.096	.033	--	.074	--	
	do	do	do	--	--	--	1959	1.0	.097	.033	--	.071	--	
	do	do	do	--	--	--	1960	1.0	.093	.032	--	.024	--	
72-17	Onion Creek No. 2	do	do	.48	.48	--	1957	--	.132	.042	--	--	--	FS
	do	do	do	--	--	--	1958	1.0	.083	.026	--	.1226	--	
	do	do	do	--	--	--	1959	1.0	.081	.026	--	.0004	--	
	do	do	do	--	--	--	1960	1.0	.069	.022	--	.0206	--	
72-18	Onion Creek No. 3	do	do	.65	.65	--	1958	--	.191	.062	--	--	--	FS
	do	do	do	--	--	--	1959	1.0	.205	.067	--	17/.0000	--	
	do	do	do	--	--	--	1960	1.0	.186	.061	--	.0273	--	

1/ Overtopped by sediment, no measurements taken in 1956; sediment removed down to original reservoir bottom.

2/ Sediment removed in summer 1956 - no measurements taken.

3/ Last data for which significant data are available; reservoir inoperative until 1956 when sediment was removed.

4/ Loss of sediment not applicable to watershed as a whole.

5/ Period of abnormal operation. Represents 0.3 year of sediment accumulation behind partially closed gates and 1.5 years of sediment depletion with wide open gates. Sediment value is residue at end of period.

6/ Represents sedimentation for 3 full runoff years because no significant inflow occurred from Oct. 1, 1953, to Feb. 13, 1954, or from Oct. 1, 1956, to Nov. 15, 1956.

7/ Original capacity determined from 1965 survey.

8/ Original capacity determined from 1964 survey.

9/ Effective drainage area prior to 1931 was 216 sq. mi. There after 202.2 sq. mi.

10/ Data at elevation 748 (limit of 8-7-69 survey). Spillway crest elevation 750 ft.

11/ Natural drainage area. Flow diverted into the reservoir from Stony Gorge drainage basin after 1914.

12/ Spillway elevation (flashboard crest elevation 50,900); USGS Water-Supply Paper 1798-F.

13/ Based on the natural drainage area.

14/ Excluding 3 sq. mi. above P. G. & E. Canal.

15/ The natural drainage area less area above East Park Reservoir. Flow diverted from the basin to East Park Reservoir after 1914.

16/ U. S. Bureau of Reclamation capacity curve (3-31-45); USGS Water-Supply Papers 1635 Part II., 1798-F.

17/ Net sediment loss - treated as 0 gain.

* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE-FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
SACRAMENTO, EEL AND RUSSIAN RIVER BASINS (Continued)													
72-19a	Onion Creek No. 5	Onion Creek, trib. of Amer. River.	Soda Springs, Calif.	0.39	0.39	— 1957	—	0.177	0.058	—	—	—	FS
	do	do	do	—	—	— 1958	1.0	.112	.037	—	0.1260	—	
	do	do	do	—	—	— 1959	1.0	.101	.033	—	.0256	—	
	do	do	do	—	—	— 1960	1.0	.046	.015	—	.1750	—	
72-20a	Onion Creek No. 7	do	do	.80	.80	— 1958	—	.0754	.025	—	—	—	FS
	do	do	do	—	—	— 1959	1.0	.0720	.024	—	.0069	—	
	do	do	do	—	—	— 1960	1.0	.0605	.020	—	.0120	—	
72-21	Los Trancos	Trib. of Dry Creek	Geyserville, Calif.	.038	.037	Aug. 1961 1/	—	1/10.30	*.221	—	—	—	SCS
	do	do	do	—	—	Oct. 1965	4	9.86	*.211	*66	2.97	4,269	
72-22	Hazel Hill	do	do	.175	.173	Oct. 1960 1/	—	1/21.50	*.099	—	—	—	SCS
	do	do	do	—	—	Oct. 1965	5	21.06	*.097	*65	.52	756	
72-23	Bake Wood	do	Cloverdale, Calif.	1.69	1.68	Oct. 1958 1/	—	1/54.85	*.027	—	—	—	SCS
	do	do	do	—	—	Nov. 1965	7	46.76	*.023	*78.9	.69	1,186	
72-24	Nielsen	Trib. of Santa Rosa Creek	Santa Rosa, Calif.	.187	.184	Nov. 1960 1/	—	2/17.36	.072	—	—	—	SCS
	do	do	do	—	—	Nov. 1964	4	16.62	.088	*65	.96	1,359	
72-25	Lee Prediani	Seven Oaks Creek	Healdsburg, Calif.	.594	.592	Oct. 1960 1/	—	3/6.78	*.010	—	—	—	SCS
	do	do	do	—	—	Oct. 1965	5	6.61	*.007	4/87	.73	1,383	
72-26a	Caspar Creek - South Fork	Caspar Creek	Caspar, Calif.	1.63	1.63	Fall 1962	—	—	—	—	—	—	FS
	do	do	do	—	—	Summer 1963	.80	—	—	—	.034	—	
	do	do	do	—	—	Summer 1964	1.0	—	—	—	.028	—	
	do	do	do	—	—	Summer 1965	1.0	—	—	—	.139	—	
	do	do	do	—	—	Summer 1966	1.0	—	—	—	.119	—	
	do	do	do	—	—	Summer 1967	1.0	—	—	—	.068	—	
	do	do	do	—	—	Summer 1968	1.0	—	—	—	.083	—	
	do	do	do	—	—	Summer 1969	1.0	—	—	—	.143	—	
	do	do	do	—	—	Summer 1970	1.0	—	—	—	.091	—	
72-27a	Caspar Creek - North Fork	do	Fort Bragg, Calif.	1.92	1.92	Fall 1962	—	—	—	—	—	—	FS
	do	do	do	—	—	Summer 1963	.70	—	—	—	.039	—	
	do	do	do	—	—	Summer 1964	1.0	—	—	—	.063	—	
	do	do	do	—	—	Summer 1965	1.0	—	—	—	.425	—	
	do	do	do	—	—	Summer 1966	1.0	—	—	—	.491	—	
	do	do	do	—	—	Summer 1967	1.0	—	—	—	.037	—	
	do	do	do	—	—	Summer 1968	1.0	—	—	—	.033	—	
	do	do	do	—	—	Summer 1969	1.0	—	—	—	.262	—	
	do	do	do	—	—	Summer 1970	1.0	—	—	—	.141	—	
72-28	McGuire	Virgin Creek	Fort Bragg, Calif.	.086	.083	July 1954 5/	—	7.3	.11	—	—	—	SCS
	do	do	do	—	—	July 1967	13	7.07	.11	*60	.21	274	
72-29	Lazy Creek	Lazy Creek	Philo, Calif.	.666	.663	Aug. 1955 5/	—	26.94	.038	—	—	—	SCS
	do	do	do	—	—	July 1967	12	19.50	.027	67	.94	1,372	
72-30	Appleton	Unnamed	Healdsburg, Calif.	.166	.161	Aug. 1950 5/	—	25.18	.189	—	—	—	SCS
	do	do	do	—	—	Aug. 1967	17	24.34	.182	59	.37	475	
72-31	N. S. Wilson	Bourns Gulch	Gualala, Calif.	.285	.283	July 1952 5/	—	14.06	*.040	—	—	—	SCS
	do	do	do	—	—	July 1967	15	13.02	*.037	*60	.24	324	
KLAMATH, ROGUE, AND UMPQUA RIVER BASINS													
73-1	Emigrant Gap	Emigrant Creek	Ashland, Oreg.	61.6	61.2	Oct. 1924	—	6/8,300	—	—	—	—	BR
	do	do	do	—	—	Oct. 1951	27	7,500	—	—	.314	—	
73-2	Coyote Creek #1	Trib. South Umpqua River	Tiller, Oreg.	.267	.267	June 1965	—	7/.029	.0002	—	—	—	FS
	do	do	do	—	—	Aug. 1966	1.12	—	—	—	.0032	—	
	do	do	do	—	—	Aug. 1967	1.01	—	—	—	.0025	—	
	do	do	do	—	—	Aug. 1968	1.0	—	—	—	.0016	—	
	do	do	do	—	—	July 1969	.96	—	—	—	.0008	—	
	do	do	do	—	—	July 1970	.98	—	—	—	.0019	—	
73-3	Coyote Creek #2	do	do	.264	.264	June 1965	—	7/.012	.00004	—	—	—	FS
	do	do	do	—	—	Aug. 1966	1.11	—	—	—	.0032	—	
	do	do	do	—	—	Aug. 1967	1.01	—	—	—	.0003	—	
	do	do	do	—	—	Aug. 1968	1.0	—	—	—	.0006	—	
	do	do	do	—	—	July 1969	.96	—	—	—	.0002	—	
	do	do	do	—	—	July 1970	.98	—	—	—	.0004	—	
73-4	Coyote Creek #3	do	do	.192	.192	June 1965	—	7/.011	.0002	—	—	—	FS
	do	do	do	—	—	Aug. 1966	1.11	—	—	—	.0147	—	
	do	do	do	—	—	Aug. 1967	1.01	—	—	—	.008	—	
	do	do	do	—	—	Aug. 1968	1.0	—	—	—	.0003	—	
	do	do	do	—	—	July 1969	.96	—	—	—	.011	—	
	do	do	do	—	—	July 1970	.98	—	—	—	.0077	—	

(74)

73-5	Coyote Creek #4	Trib. South Umpqua River	Tiller, Oreg.	.188	.188	June	1965	--	7/--	--	--	--	--	FS
	do	do	do	--	--	Aug.	1966	1.11	--	--	--	.0096	--	
	do	do	do	--	--	Aug.	1967	1.01	--	--	--	.0009	--	
	do	do	do	--	--	Aug.	1968	1.0	--	--	--	.0027	--	
	do	do	do	--	--	July	1969	.94	--	--	--	.001	--	
	do	do	do	--	--	July	1970	.98	--	--	--	.0049	--	

LOWER COLUMBIA RIVER BASIN AND PACIFIC COAST BASINS IN NORTHERN OREGON

74-1	Condit (White Salmon)	White Salmon River	Underwood, Wash.	337	337	--	1913	--	8/1,081	--	--	--	--	SCS
	do	do	do	--	--	May	1936	23	1,054	--	--	.004	--	
74-2	Lake Harriet (Oak Grove)	Trib. of Clackamas River	Portland, Oreg.	126	126	Aug.	1924	--	256	.001	--	--	--	SCS
	do	do	do	--	--	Aug.	1948	24	252	.001	--	.0013	--	
74-3	McKay	McKay Creek	Pendleton, Oreg.	186	184	Oct.	1926	--	73,737	--	--	--	--	SCS
	do	do	do	--	--	July	1946	19.75	73,474	--	*40	.07	61	
74-4	Cottage Grove	Coast Fk. Willamette River	Cottage Grove, Oreg.	104	102	Oct.	1942	--	33,000	*.165	--	--	--	CE
	do	do	do	--	--	Dec.	1947	5.1	32,873	*.164	--	.244	--	
74-5a	Luther Claypool Pond	Trib. of Beaver Creek	Post, Oreg.	1.09	1.09	--	1946	--	3.79	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1951	5	3.59	--	*70	.037	56.4	
74-6	Paul Jaegar No. 1 Pond	Trib. of John Day River	Condon, Oreg.	.625	.624	--	1943	--	1.82	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1951	8	1.40	--	*70	.085	130	
74-7	Paul Jaegar No. 2 Pond	Trib. of Rock Creek	do	.468	.467	--	1946	--	3.19	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1951	5	2.51	--	*70	.299	456	
74-8a	Paul Jaegar No. 3 Pond	Trib. of John Day River	do	.250	.249	--	1944	--	3.04	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1951	7	2.81	--	*70	.12	183	
74-9	J. M. Wilson Pond	Trib. of Deschutes River	Moro, Oreg.	1.50	1.50	--	1946	--	1.08	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1951	5	.97	--	*70	.01	15.24	
74-10	Willard Barnet Pond	Buck Creek	Kent, Oreg.	.210	.209	--	1941	--	2.91	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1951	10	2.41	--	*70	.24	366	
74-11	Arthur Schmidt Pond	Trib. of Buck Creek	Shaniko, Oreg.	.115	.114	--	1940	--	2.00	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1951	11	1.97	--	*70	.03	45.73	
74-12	Rock Creek Improvement Co.	Trib. of White River	Tygh Valley, Oreg.	5.62	5.60	--	1938	--	250	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1951 9/	13	247	--	*70	.045	68.61	
74-13	Vernon Christ Pond	Five Mile Creek	Dufur, Oreg.	.089	.088	--	1941	--	1.61	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1951	10	1.39	--	*70	.227	346	
74-14	Milt J. Martin Pond	Mill Creek	The Dalles, Oreg.	.070	.069	--	1944	--	2.72	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1951	7	2.58	--	*70	.29	442	
74-15	Hunt Livestock Co. Pond	Trib. of Buck Creek	Shaniko, Oreg.	.050	.050	--	1942	--	2.25	--	--	--	--	SCS
	do	do	do	--	--	Oct.	1951	9	2.15	--	*70	.20	305	
74-16	Cold Springs	Cold Springs Canyon	Cold Springs, Oreg.	188	186	Feb.	1908	--	49,709	--	--	--	--	SCS
	do	do	do	--	--	May	1951	43	44,668	--	78	.63	1,070	
74-17	Dorena	Row River	Cottage Grove, Oreg.	265	262	Oct.	1949	--	77,500	.143	--	--	--	CE
	do	do	do	--	--	Sept.	1958	8.9	77,150	.142	--	.150	--	
74-18	H. J. Andrews #1	Trib. Blue River	Blue River, Oreg.	.37	.37	Aug.	1965	--	7/.12	.0001	--	--	--	FS
	do	do	do	--	--	Aug.	1966	1.05	--	--	--	.011	--	
	do	do	do	--	--	July	1967	.92	--	--	--	.214	--	
	do	do	do	--	--	Aug.	1968	.99	--	--	--	.243	--	
	do	do	do	--	--	Aug.	1969	.84	--	--	--	.332	--	
	do	do	do	--	--	Aug.	1970	.96	--	--	--	.095	--	
74-19	H. J. Andrews #2	do	do	.233	.233	Aug.	1965	--	7/.056	.0001	--	--	--	FS
	do	do	do	--	--	Aug.	1966	.98	--	--	--	.0311	--	
	do	do	do	--	--	July	1967	.92	--	--	--	0	--	
	do	do	do	--	--	Aug.	1968	.99	--	--	--	.0013	--	
	do	do	do	--	--	Aug.	1969	1.0	--	--	--	.0157	--	
	do	do	do	--	--	Aug.	1970	1.0	--	--	--	.0155	--	
74-20	H. J. Andrews #3	do	do	.391	.391	Dec.	1965	--	7/.061	.00005	--	--	--	FS
	do	do	do	--	--	Apr.	1966	.31	--	--	--	--	--	
	do	do	do	--	--	Aug.	1967	.97	--	--	--	.054	--	
	do	do	do	--	--	Aug.	1968	1.0	--	--	--	.041	--	
	do	do	do	--	--	Aug.	1969	1.0	--	--	--	.10	--	
	do	do	do	--	--	Aug.	1970	.96	--	--	--	.076	--	

1/ Original capacity determined by 1965 survey.
2/ Original capacity determined from 1964 survey. Capacity shown is for an elevation 4 ft. below spillway crest.
3/ Original capacity obtained during 1965 survey. Total capacity with flashboards = 9.21 ac.-ft.
4/ From one disturbed and two undisturbed samples.
5/ Original capacity determined from 1967 survey.
6/ Based on original topographic survey; believed to be unreliable.
7/ Sediment measured and removed periodically.
8/ Dam was raised 5 feet in 1927.
9/ Built in 1941. Reservoir was thoroughly cleaned in 1945.
* Estimated or assumed.

SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE -FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
	COLUMBIA RIVER BASIN (GRAND COULEE TO UMATILLA) AND PACIFIC COAST DRAINAGE IN WASHINGTON Yakima, Chelan, and Okanogan River Basins												
75-1	Diablo	Skagit River	Bellingham, Wash.	1,100	1,100	— 1930	—	89,220	—	—	—	—	SCS
	do	do	do	—	—	July 1936	6	88,862	—	--	0.054	—	
75-2	High Valley Ranch #1 Pond	Wenas Creek	Yakima, Wash.	4.11	4.10	— 1939	—	8.61	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1951	12	7.63	—	*70	.02	30.69	
75-3	High Valley Ranch #2 Pond	do	Ellensburg, Wash.	.184	.184	— 1940	—	.58	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1951	11	.51	—	*70	.04	61.0	
75-4	High Valley Ranch #3 Pond	do	do	.312	.312	— 1940	—	1.53	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1951	11	1.42	—	*70	.03	46.0	
75-5	Henry Clerf Pond	Rye Grass Creek	do	6.47	6.47	— 1946	—	2.38	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1951	5	2.02	—	*70	.01	15.24	
75-6	Coffin Sheep Co. Pond	Naches River	Yakima, Wash.	.482	.480	— 1939	—	2.63	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1951	12	2.47	—	*70	.027	41.16	
75-7	Fox Creek	Fox	Ardenvoir, Wash.	1.82	1.82	Summer 1965	—	1/—	—	—	—	—	FS
	do	do	do	—	—	Summer 1966	1	—	—	110	.0076	18.4	
	do	do	do	—	—	Summer 1967	1	—	—	—	.0076	18.4	
	do	do	do	—	—	Summer 1968	1	—	—	—	.0022	5.3	
	do	do	do	—	—	Summer 1969	1	—	—	—	.0076	18.4	
	do	do	do	—	—	Summer 1970	1	—	—	—	0	0	
	do	do	do	—	—	Summer 1971	1	—	—	—	.0577	136.5	
75-8	Burns	Burns	do	2.18	2.18	Summer 1965	—	1/—	—	—	—	—	FS
	do	do	do	—	—	Summer 1966	1	—	—	—	.0	0	
	do	do	do	—	—	Summer 1967	1	—	—	—	.0	0	
	do	do	do	—	—	Summer 1968	1	—	—	—	.0	0	
	do	do	do	—	—	Summer 1969	1	—	—	—	.0	0	
	do	do	do	—	—	Summer 1970	1	—	—	—	.0	0	
	do	do	do	—	—	Summer 1971	1	—	—	110	.0366	87.9	
75-9	McCree	McCree	do	1.985	1.985	Summer 1965	—	1/—	—	—	—	—	FS
	do	do	do	—	—	Summer 1966	1	—	--	—	0	0	
	do	do	do	—	—	Summer 1967	1	—	--	—	0	0	
	do	do	do	—	—	Summer 1968	1	—	—	—	0	0	
	do	do	do	—	—	Summer 1969	1	—	--	—	0	0	
	do	do	do	—	—	Summer 1970	1	—	--	—	0	0	
	do	do	do	—	—	Summer 1971	1	—	--	110	.0165	39.7	
75-10	Crabtree	Trib. White	Auburn, Wash.	.475	.11	May 1967	—	6.92	.02	—	—	—	SCS
	do	do	do	—	—	June 1970	3	6.38	.009	*60	1.65	2,156	
75-11	Llewellyn	Trib. Goose	Wilbur, Wash.	1.25	1.25	July 1957	—	17.52	.26	—	—	—	SCS
	do	do	do	—	—	July 1967	10	8.62	.13	*80	.73	1,272	
75-12	Schwisow	No name	Ritzville, Wash.	4.15	4.15	May 1959	—	3.54	.04	—	—	—	SCS
	do	do	do	—	—	May 1969	10	0	—	*80	.09	156.8	
75-13	Rex Lyle	do	do	.71	.71	June 1959	—	2.75	.2	—	—	—	SCS
	do	do	do	—	—	May 1969	10	1.66	.12	*80	.155	270	
75-14	Schoessler	do	do	.31	.31	June 1951	—	2.24	.37	—	—	—	SCS
	do	do	do	—	—	May 1969	18	0	—	*80	.40	696.8	
75-15	John Landa (PU 90, BLK. 81)	do	Moses Lake, Wash.	.092	.092	Jan. 1970	—	2/—	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1970	1	—	—	*60	.8	1,045	
75-16	Shaffer	do	do	.356	.356	June 1958	—	2/—	—	—	—	—	SCS
	do	do	do	—	—	Nov. 1970	12	—	—	*60	.28	366	
75-17	Sun Spiced No. 1	do	do	.17	.17	— 1969	—	2/—	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1970	1	—	—	*60	.73	954	
75-18	Sun Spiced No. 2	do	do	.80	.80	June 1969	—	2/—	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1970	1	—	—	*60	.52	680	
75-19	Sheffels	do	Wilbur, Wash.	4.77	4.77	Apr. 1963	—	5.1	.02	—	—	—	SCS
	do	do	do	—	—	May 1969	6	.85	.003	*70	.15	229	
75-20	Tolosky	Trib. Crab	Edwall, Wash.	2.26	2.26	Apr. 1957	—	13.43	.09	—	—	—	SCS
	do	do	do	—	—	June 1964	7	0	—	*80	.85	1,480	
75-21	Terwilliger (PU 273, BLK. 1)	No Name	Warden, Wash.	.05	.05	Apr. 1968	—	2/—	—	—	—	—	SCS
	do	do	do	—	—	Dec. 1968	1	—	—	*60	1.4	1,829	
	do	do	do	—	—	Dec. 1969	1	—	—	*60	8.6	11,238	
75-22	Ruby	Goose Creek	Davenport, Wash.	4.10	3.85	— 1938	—	22.91	.10	—	—	—	SCS
	do	do	do	—	—	Apr. 1969	30	2.56	.01	*70	.175	266	

COLUMBIA RIVER BASIN (INTERNATIONAL BOUNDARY TO GRAND COULEE) AND PACIFIC COAST DRAINAGE IN WASHINGTON
Pend Oreille, Spokane, Walla Walla, and Lower Snake River Basins

76-1	Mrs. Weise No. 1 Pond	Austin Creek	Austin, Wash.	.129	.128	—	1945	—	1.45	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	6	1.23	—	*70	.31	473	
76-2	Mrs. Weise No. 2 Pond	Trib. of Austin Creek	do.	.218	.217	—	1945	—	2.54	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	6	2.14	—	*70	.31	473	
76-3a	Lester Reeves No. 1 Pond	Austin Creek E. & S. Fork	do.	.101	.100	—	1941	—	1.45	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	10	1.18	—	*70	.27	4,116	
76-4	Lester Reeves No. 2 Pond	Austin Creek	do.	.125	.125	—	1945 3/	—	1.21	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	6	.69	—	*70	.70	1,067	
76-5	Ben Holt Pond	Latah Creek	Waverly, Wash.	.110	.109	—	1944	—	2.20	—	—	—	—	SCS
	do.	do.	do.	—	—	Oct.	1938	7	2.11	—	*70	.12	183	
76-6	Guy T. Wood Pond	Trib. of Clearwater River	Lewiston, Idaho	.024	.023	—	1946	—	4.22	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	5	3.07	—	*70	5.30	9,238	
76-7	Ed Hamilton Pond	Clearwater River	Orofino, Idaho	.021	.020	—	1946	—	2.54	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	5	2.12	—	*70	4.20	6,403	
76-8	Walden Wasson Pond	do.	Nez Perce, Idaho	.015	.014	—	1945	—	4.58	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	6	4.40	—	*70	2.14	3,263	
76-9	Henry Hartemender Pond	Palouse River	Potlatch, Idaho	.021	.020	—	1943	—	2.71	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	8	2.52	—	*70	1.20	1,830	
76-10	George Heddal Pond	do.	Harvard, Idaho	.063	.062	—	1941	—	2.69	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	10	2.61	—	*70	.19	290	
76-11a	Johanna Nelson Pond	do.	Deary, Idaho	.024	.022	—	1943	—	5.16	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	8	4.97	—	*70	2.0	3,050	
76-12	Ed Galloway Pond	do.	do.	.014	.014	—	1944	—	1.29	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	7	1.23	—	*70	.44	976	
76-13	A. E. Tweedy Pond	Clearwater River	Nez Perce, Idaho	.014	.014	—	1931	—	.80	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1951	20	.62	—	*70	.44	976	
76-14	Walla Walla River Arm McNary Reservoir	Walla Walla River	Wallula, Wash.	1,760	1,760	Apr.	1953	—	9,480	.023	—	—	—	CE
	do.	do.	do.	—	—	Nov.	1956	3.61	7,237	.017	*75	.405	662	
	do.	do.	do.	—	—	Nov.	1958	2.00	5,507	.013	—	.484	791	
	do.	do.	do.	—	—	Nov.	1960	2.00	4,636	.011	—	.255	417	
	do.	do.	do.	—	—	Sept.	1961	.83	3,569	.008	—	.744	1,215	
	do.	do.	do.	—	—	Sept.	1962	1.00	3,458	.008	—	.073	119	
	do.	do.	do.	—	—	Sept.	1963	1.00	2,918	.007	*75	.307	501	
	do.	do.	do.	—	—	Oct.	1964	1.00	2,874	.007	—	.023	38	
	do.	do.	do.	—	—	July	1965	.75	1,912	.004	—	4/1.027	4/1,678	
76-15	Main Fork Moose Creek	Moose Creek	Elk City, Idaho	6.51	6.51	Oct.	1965	—	1/.087	—	—	—	—	FS
	do.	do.	do.	—	—	Oct.	1966	1	—	—	*90	.0024	4.8	
	do.	do.	do.	—	—	Oct.	1967	1	—	—	*90	.0064	12.9	
	do.	do.	do.	—	—	Oct.	1968	1	—	—	*90	.0024	4.7	
	do.	do.	do.	—	—	Oct.	1969	1	—	—	*90	.0043	8.5	
	do.	do.	do.	—	—	Oct.	1970	1	—	—	*90	.0048	9.4	
	do.	do.	do.	—	—	Oct.	1971	1	—	—	*90	.0134	26.2	
76-16	East Fork Moose Creek	East Fork Moose Creek	do.	5.56	5.56	Oct.	1965	—	1/.039	—	—	—	—	FS
	do.	do.	do.	—	—	Oct.	1966	1	—	—	*90	.0022	4.1	
	do.	do.	do.	—	—	Oct.	1967	1	—	—	*90	.0056	11.0	
	do.	do.	do.	—	—	Oct.	1968	1	—	—	*90	.0016	3.8	
	do.	do.	do.	—	—	Oct.	1969	1	—	—	*90	.0029	5.6	
	do.	do.	do.	—	—	Oct.	1970	1	—	—	*90	.0045	8.8	
	do.	do.	do.	—	—	Oct.	1971	1	—	—	*90	.0070	13.7	

COLUMBIA RIVER BASIN IN CANADA

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SNAKE RIVER BASIN (FROM KING HILL TO GRANDE RONDE RIVER)

78-1	Orchard	Indian Creek	Boise, Idaho	43	42.8	—	1892	—	4,737	—	—	—	—	SCS
	do.	do.	do.	—	—	June	1947	55	4,648	—	—	.03	—	
78-2	Black Canyon	Payette River	Emmett, Idaho	2,750	5/2,540	June	1924	—	37,699	.017	—	—	—	SCS
	do.	do.	do.	—	—	June	1936	12	33,622	.015	—	.132	—	
78-3	Pleasant Valley	Black's Creek	Boise, Idaho	*16	*16	—	1905	—	7,097	—	—	—	—	SCS
	do.	do.	do.	—	—	June	1947	42	7,055	—	—	.063	—	
78-4	Arrowrock-Boise Project	Boise River	do.	2,211	2,170	Feb.	1915	—	279,250	.186	—	—	—	BR
	do.	do.	do.	—	—	Oct.	1947	32.6	271,590	.181	73	.109	173.3	
78-5	Andy Anderson Pond	Weiser River	Cambridge, Idaho	.414	.390	—	1905	—	104.20	—	—	—	—	SCS
	do.	do.	do.	—	—	Aug.	1951	46	100.67	—	*70	.156	257	
78-6	Milton Branch Pond	Trib. of Weiser River	do.	.436	.424	—	1940	—	44.49	—	—	—	—	
	do.	do.	do.	—	—	Sept.	1952	11	43.26	—	*70	.259	395	

1/ Sediment measured and removed periodically.
2/ Desilting structure for return irrigation water.
3/ Built 1941. Reservoir was thoroughly cleaned in 1945.
4/ Includes above crest deposits within original flow lines.
5/ Does not include drainage area above Payette Lakes.
* Estimated or assumed.

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SUMMARY OF
RESERVOIR SEDIMENTATION SURVEYS MADE IN THE UNITED STATES THROUGH 1970

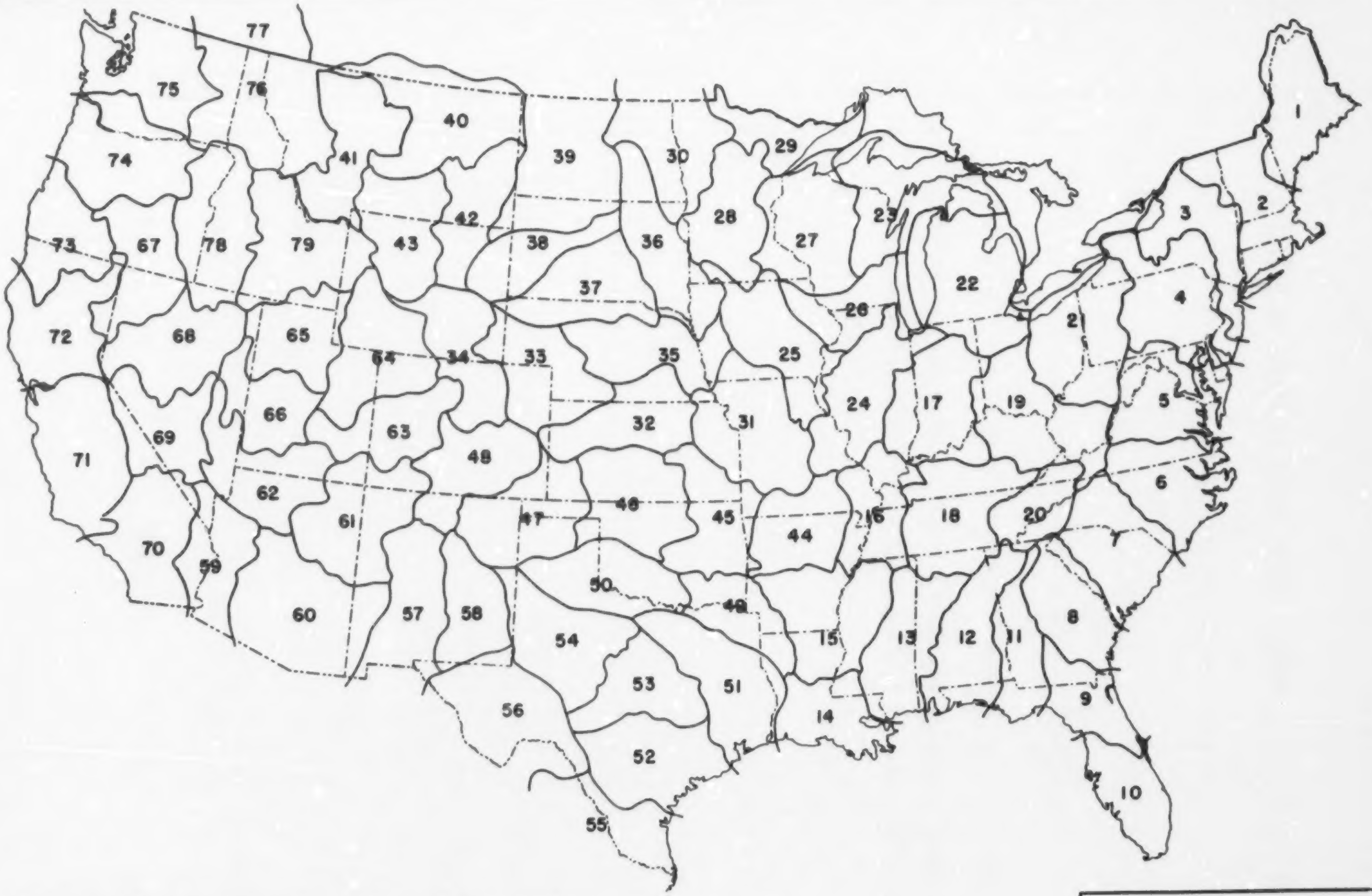
DATA SHEET NUMBER	RESERVOIR	STREAM	NEAREST TOWN	DRAINAGE AREA (SQUARE MILES)		DATE OF SURVEY	PERIOD BETWEEN SURVEYS (YEARS)	STORAGE CAPACITY (ACRE -FT.)	CAPACITY AVG. ANN. INFLOW RATIO (ACRE-FT. PER ACRE-FT)	SPECIFIC WEIGHT (DRY) (LB. PER CU. FT.)	AVG. ANN. SEDIMENT ACCUMULATION PER SQ. MI. OF NET DR. AREA FOR PERIOD SHOWN		AGENCY SUPPLYING DATA
				TOTAL	NET						AC.-FT.	TONS	
			SNAKE RIVER BASIN (FROM KING HILL TO GRANDE RONDE RIVER) (Continued)										
78-7	W. B. Wisninger Pond	Trib. of Weiser River	Cambridge, Idaho	0.543	0.538	— 1943	—	17.58	—	—	—	—	SCS
	do	do	do	—	—	Aug. 1951	8	16.57	—	70	0.240	366	
78-8	Willow Sweed Pond	Little Willow Creek	Payette, Idaho	.218	.217	— 1945	—	2.90	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1951	6	2.71	—	70	.147	226	
78-9	Twin Puddles Pond	Trib. of Boise River	Boise, Idaho	1.61	1.61	— 1941	—	7.82	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1951	10	7.52	—	70	.02	30.49	
78-10	Lambkin Pond	do	Mountain Home, Idaho	.193	.191	— 1941	—	4.56	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1951	10	4.49	—	70	.05	76.23	
78-11	Mud Springs Pond	do	do	1.07	1.06	— 1939	—	12.18	—	—	—	—	SCS
	do	do	do	—	—	Sept. 1951	12	11.61	—	70	.05	65.73	
78-12	J. J. Colton Pond	Trib. of Powder River	Keating, Oreg.	.484	.483	— 1939	—	1.08	—	—	—	—	SCS
	do	do	do	—	—	Oct. 1951	12	.84	—	70	.04	61.0	
78-13	Hoskins Pond No. 1	Trib. of Clover Creek	Westfall, Oreg.	.12	—	— 1952	—	1.56	—	—	—	—	SCS
	do	do	do	—	—	May 1956	4	1.52	—	—	.079	—	
78-14	Hoskins Pond No. 2	do	do	.27	—	— 1952	—	6.94	—	—	—	—	SCS
	do	do	do	—	—	May 1956	4	6.76	—	—	.17	—	
78-15a	Wheaton	Wheaton Creek	do	14.0	—	— 1948	—	52.27	—	—	—	—	SCS
	do	do	do	—	—	May 1956	8	31.97	—	—	.18	—	
78-16	E-1 Creek Sediment Dam	Trib. Silver Creek	Cascade, Idaho	.098	.098	Aug. 1965	—	1/.038	—	—	—	—	FS
	do	do	do	—	—	June 1966	.80	—	—	—	.0004	—	
	do	do	do	—	—	June 1967	.98	—	—	—	.0007	—	
	do	do	do	—	—	July 1968	1.09	—	—	—	.0047	—	
	do	do	do	—	—	Nov. 1968	.35	—	—	—	.0003	—	
	do	do	do	—	—	June 1969	.60	—	—	—	.0409	—	
	do	do	do	—	—	Aug. 1969	.21	—	—	—	0	—	
	do	do	do	—	—	July 1970	.84	—	—	—	.0194	—	
	do	do	do	—	—	Sept. 1970	.21	—	—	—	0	—	
78-17	Control Creek Sediment Dam	do	do	.775	.775	Aug. 1965	—	1/.013	—	—	—	—	FS
	do	do	do	—	—	June 1966	.79	—	—	—	.0002	—	
	do	do	do	—	—	June 1967	1.0	—	—	—	.0014	—	
	do	do	do	—	—	July 1968	1.07	—	—	—	.0006	—	
	do	do	do	—	—	Nov. 1968	.36	—	—	—	.0011	—	
	do	do	do	—	—	June 1969	.62	—	—	—	.0079	—	
	do	do	do	—	—	Aug. 1969	.17	—	—	—	0	—	
	do	do	do	—	—	June 1970	.83	—	—	—	.0108	—	
	do	do	do	—	—	Sept. 1970	.21	—	—	—	0	—	
78-18	Cabin Creek Sediment Dam	do	do	.40	.40	July 1965	—	1/.046	—	—	—	—	FS
	do	do	do	—	—	June 1966	.97	—	—	—	.0002	—	
	do	do	do	—	—	June 1967	.99	—	—	—	.0008	—	
	do	do	do	—	—	July 1968	1.07	—	—	—	.0028	—	
	do	do	do	—	—	Nov. 1968	.37	—	—	—	.0001	—	
	do	do	do	—	—	June 1969	.60	—	—	—	.0416	—	
	do	do	do	—	—	Aug. 1969	.19	—	—	—	0	—	
	do	do	do	—	—	June 1970	.82	—	—	—	.0162	—	
	do	do	do	—	—	Sept. 1970	.21	—	—	—	0	—	
78-19	Ditch Creek Sediment Dam	do	do	.41	.41	Sept. 1965	—	1/.023	—	—	—	—	FS
	do	do	do	—	—	June 1966	.75	—	—	—	.0006	—	
	do	do	do	—	—	June 1967	1.0	—	—	—	.0807	—	
	do	do	do	—	—	July 1968	1.07	—	—	—	.0039	—	
	do	do	do	—	—	Nov. 1968	.36	—	—	—	.002	—	
	do	do	do	—	—	June 1969	.56	—	—	—	.067	—	
	do	do	do	—	—	Aug. 1969	.23	—	—	—	0	—	
	do	do	do	—	—	June 1970	.82	—	—	—	.0014	—	
	do	do	do	—	—	Sept. 1970	.21	—	—	—	0	—	
78-20	"G" Creek Sediment Dam	do	do	.73	.73	Aug. 1965	—	1/.0027	—	—	—	—	FS
	do	do	do	—	—	June 1966	.80	—	—	—	.0103	—	
	do	do	do	—	—	June 1967	.98	—	—	—	.007	—	
	do	do	do	—	—	July 1968	1.08	—	—	—	.00181	—	
	do	do	do	—	—	Oct. 1968	.30	—	—	—	.0177	—	
	do	do	do	—	—	June 1969	.60	—	—	—	.04	—	
	do	do	do	—	—	Aug. 1969	.24	—	—	—	0	—	
	do	do	do	—	—	June 1970	.82	—	—	—	.0076	—	
	do	do	do	—	—	Sept. 1970	.21	—	—	—	0	—	
78-21	"D" Creek Sediment Dam	do	do	.47	.47	July 1965	—	1/.017	—	—	—	—	FS
	do	do	do	—	—	June 1966	.85	—	—	—	.0017	—	
	do	do	do	—	—	June 1967	.99	—	—	—	.0097	—	

(78)

	do.	do.	do.	—	—	July	1968	1.09	—	—	—	.008	—	
	do.	do.	do.	—	—	Nov.	1968	.35	—	—	—	.0026	—	
	do.	do.	do.	—	—	June	1969	.57	—	—	—	.0034	—	
	do.	do.	do.	—	—	Aug.	1969	.22	—	—	—	0	—	
	do.	do.	do.	—	—	June	1970	.68	—	—	—	.0015	—	
	do.	do.	do.	—	—	Sept.	1970	.21	—	—	—	0	—	
79-22	Eggers Creek Sediment Dam	do.	do.	.5	.5	Aug.	1965	—	1/.013	—	—	—	—	PS
	do.	do.	do.	—	—	June	1966	.61	—	—	—	.0012	—	
	do.	do.	do.	—	—	June	1967	1.02	—	—	—	.0056	—	
	do.	do.	do.	—	—	July	1968	1.08	—	—	—	.0023	—	
	do.	do.	do.	—	—	Nov.	1968	.35	—	—	—	.0012	—	
	do.	do.	do.	—	—	June	1969	.58	—	—	—	2/0	—	
	do.	do.	do.	—	—	Aug.	1969	.21	—	—	—	0	—	
	do.	do.	do.	—	—	June	1970	.62	—	—	—	.013	—	
	do.	do.	do.	—	—	Sept.	1970	.21	—	—	—	0	—	
			SNAKE RIVER BASIN (ABOVE KINGS HILL) AND SALMON RIVER BASIN											
79-1	Rattlesnake Butte Pond	Big Wood River	Gooding, Idaho	4.81	4.80	—	1943	—	25.56	—	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1952	8	23.89	—	*70	.04	61	
79-2	Salmon Falls	Salmon Falls Creek	Rogerson, Idaho	1,960	1,555	—	1910	—	229,690	—	—	—	—	SCS
	do.	do.	do.	—	—	Oct.	1955	45.0	227,282	—	*50	.034	37	
79-3	Pioneer	Clover Creek	Glenns Ferry, Idaho	183	183	—	1926	—	1,264	—	—	—	—	SCS
	do.	do.	do.	—	—	Aug.	1956	50±	898	—	—	.04	—	
79-4	Tailholt "A" Creek Sediment Dam	Trib. South Fork Salmon	Yellow Pine, Idaho	.845	.84	Aug.	1967	—	1/.0244	—	—	—	—	PS
	do.	do.	do.	—	—	May	1968	.74	—	—	—	.011	—	
	do.	do.	do.	—	—	Oct.	1968	.34	—	—	—	.0102	—	
	do.	do.	do.	—	—	May	1969	.63	—	—	—	.0199	—	
	do.	do.	do.	—	—	Sept.	1969	.34	—	—	—	.0017	—	
	do.	do.	do.	—	—	June	1970	.72	—	—	—	.017	—	
	do.	do.	do.	—	—	Sept.	1970	.25	—	—	—	0	—	
79-5	Tailholt "B" Creek Sediment Dam	do.	do.	.61	.61	Aug.	1967	—	1/.012	—	—	—	—	PS
	do.	do.	do.	—	—	May	1968	.76	—	—	—	.0085	—	
	do.	do.	do.	—	—	Oct.	1968	.40	—	—	—	.0086	—	
	do.	do.	do.	—	—	May	1969	.64	—	—	—	.0156	—	
	do.	do.	do.	—	—	Sept.	1969	.34	—	—	—	.0067	—	
	do.	do.	do.	—	—	June	1970	.72	—	—	—	.0199	—	
79-6	Tailholt "C" Sediment Dam	Trib. South Fork Salmon	Yellow Pine, Idaho	.556	.548	Aug.	1967	—	1/.015	—	—	—	—	PS
	do.	do.	do.	—	—	May	1968	.76	—	—	—	.0039	—	
	do.	do.	do.	—	—	Oct.	1968	.54	—	—	—	.011	—	
	do.	do.	do.	—	—	May	1969	.62	—	—	—	.0073	—	
	do.	do.	do.	—	—	Sept.	1969	.27	—	—	—	.0009	—	
	do.	do.	do.	—	—	June	1970	.72	—	—	—	.0134	—	
79-7	Tailholt Main Sediment Dam	do.	do.	2.54	3/2.50	—	—	—	1/.0552	—	—	—	—	PS
	do.	do.	do.	—	—	June	1966	.44	—	—	—	.0046	—	
	do.	do.	do.	—	—	Sept.	1966	.29	—	—	—	.0029	—	
	do.	do.	do.	—	—	May	1967	.48	—	—	—	.012	—	
	do.	do.	do.	—	—	Sept.	1967	.33	—	—	—	.0148	—	
	do.	do.	do.	—	—	May	1968	.44	—	—	—	.0081	—	
	do.	do.	do.	—	—	Oct.	1968	.40	—	—	—	.0082	—	
	do.	do.	do.	—	—	May	1969	.44	—	—	—	.0191	—	
	do.	do.	do.	—	—	Oct.	1969	.35	—	—	—	.0037	—	
	do.	do.	do.	—	—	June	1970	.60	—	—	—	.0077	—	
79-8	Circle End Creek Sediment Dam	do.	do.	1.452	1.452	—	—	—	1/.013	—	—	—	—	PS
	do.	do.	do.	—	—	Apr.	1966	.38	—	—	—	.0169	—	
	do.	do.	do.	—	—	Sept.	1966	.42	—	—	—	.0086	—	
	do.	do.	do.	—	—	May	1967	.65	—	—	—	.0199	—	
	do.	do.	do.	—	—	Sept.	1967	.35	—	—	—	.0143	—	
	do.	do.	do.	—	—	May	1968	.65	—	—	—	.0052	—	
	do.	do.	do.	—	—	Oct.	1968	.40	—	—	—	.0006	—	
	do.	do.	do.	—	—	Apr.	1969	.54	—	—	—	.0144	—	
	do.	do.	do.	—	—	Sept.	1969	.44	—	—	—	.0024	—	
	do.	do.	do.	—	—	June	1970	.70	—	—	—	.0006	—	
79-9	Indian Fork	Indian Fork	Ririe, Idaho	1.6	1.6	—	1939*	—	3.5	*.007	—	—	—	SCS
	do.	do.	do.	—	—	Sept.	1966	41	1.80	*.024	95.3	.025	52	
79-10	Rock Creek	Rock Creek	Ammon, Idaho	6.76	6.76	—	1946*	—	12.6	*.028	—	—	—	SCS
	do.	do.	do.	—	—	Aug.	1966	20	8.96	*.026	79.8	.027	46	
			PUERTO RICO											
60-1	Caonillas	Caonillas River	Utuado, Puerto Rico	4/48.9	47.9	June	1948	—	5/50,149	.566	—	—	—	SCS
	do.	do.	do.	—	—	Nov.	1952	4.3	49,883	.583	38.1	1.29	1,070	

1/ Pond used to take bedload samples and organic matter.
2/ All values lost due to incorrect survey.
3/ Total drainage for this dam includes drainage for Tailholt A, B and C Creeks after 8-22-67.
4/ Caonillas extension project increased the drainage area to 85.5 sq. mi.; put into operation Oct. 1952.
5/ Determined by 1952 survey.
6 Estimated or assumed.

INDEX OF RIVER BASIN MAPS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Index number corresponds to first of two numbers in summary table, which appear in column headed "Data Sheet No."

RESERVOIR SEDIMENT
DATA SUMMARY

CONCHAS RESERVOIR
NAME OF RESERVOIR

47-1b
DATA SHEET NO.

DAM	1. OWNER Corps of Engineers	2. STREAM Canadian and Conchas	3. STATE New Mexico
	4. SEC. 33 TWP. 14N RANGE 26E	5. NEAREST P O. Conchas Dam	6. COUNTY San Miguel
	7. LAT 35° 24' 10" LONG. 104° 11' 35"	8. TOP OF DAM ELEVATION 4240	9. SPILLWAY CREST ELEV. 4201 1/

RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. ORIGINAL SURFACE AREA, ACRES	13. ORIGINAL CAPACITY, ACRE-FEET	14. GROSS STORAGE, ACRE-FEET	15. DATE STORAGE BEGAN
	a. FLOOD CONTROL	4,218	13,715	301,834	601,112	1 Jan. 1939
	b. MULTIPLE USE					
	c. POWER					16. DATE NORMAL OPER. BEGAN
	d. WATER SUPPLY					
	e. IRRIGATION					
	f. CONSERVATION	4,201	10,073	296,412	299,278	Jan. 1939
	g. INACTIVE	4,155	2,820	102,866	102,866	
	17. LENGTH OF RESERVOIR Canadian 22 2/ MILES			AV. WIDTH OF RESERVOIR 4200 Contour 0.75 MILES		

WATERSHED	18. TOTAL DRAINAGE AREA 7,409 SQ. MI.	22. MEAN ANNUAL PRECIPITATION 16.2 3/ INCHES
	19. NET SEDIMENT CONTRIBUTING AREA 6,976 SQ. MI.	23. MEAN ANNUAL RUNOFF 0.4864 4/ (65.6) INCHES
	20. LENGTH 100 MILES AV. WIDTH 73 MILES	24. MEAN ANNUAL RUNOFF 193,200 (65.6) AC.-FT.
	21. MAX. ELEV. 12,000 MIN. ELEV. 4,074	25. ANNUAL TEMP MEAN 49° RANGE 30-75 3/

SURVEY DATA

26. DATE OF SURVEY 5/	27. PERIOD YEARS	28. ACCL. YEARS	29. TYPE OF SURVEY	30. NO. OF RANGES OR CONTOUR INT.	31. SURFACE AREA, ACRES	32. CAPACITY, ACRE-FEET	33. C/I. RATIO, AC.-FT. PER AC.-FT.
Jan. 1939			Contour	10 feet	13,715	601,112	3.13
May 1940	1.4	1.4	Range	14 ranges		599,712	3.13
June 1942	2.1	3.4	Range	24 ranges		585,112	3.04
Nov. 1942	.4	3.8	Range	28 ranges		581,112	3.02
Oct. 1944	1.9	5.7	Contour	10 feet	13,349	576,756	3.00
Feb. 1949	4.3	10.1	Contour	10 feet	13,553	566,162	2.95
Oct. 1963	14.7	24.83	Range (D)	45 ranges	13,077	550,798	2.87
Oct. 1970	6.93	31.76	Contour	5 feet	13,064	528,951	2.75

26. DATE OF SURVEY 5/	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW, ACRE-FEET			36. WATER INFL. TO DATE, AC.-FT.	
		a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE
	Inches					
May 1940	14.26	72,700		101,780	72,700	101,780
June 1942	22.40	859,780	1,050,090	1,805,540	560,960	1,907,320
Nov. 1942	12.50	1,079,980		431,990	615,607	2,339,310
Oct. 1944	14.32	143,750	1,168,350	273,130	458,330	2,612,440
Feb. 1949	13.68	120,500	158,858	518,140	309,960	3,130,580
Oct. 1963	13.01	144,340	336,514	2,121,880	211,790	5,252,420
Oct. 1970	12.04	157,100	394,190	1,087,100	199,670	6,339,530

26. DATE OF SURVEY 5/	37. PERIOD CAPACITY LOSS, ACRE-FEET			38. TOTAL SED. DEPOSITS TO DATE, ACRE-FEET		
	a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR
May 1940	1,400			1,400	1,000	0.143
June 1942	14,600	6,952	0.996	16,000	4,710	.675
Nov. 1942	4,000			20,000	5,260	.754
Oct. 1944	4,356	2,290	.328	24,356	4,270	.612
Feb. 1949	10,593	2,460	.353	34,949	3,460	.496
Oct. 1963	15,364	1,045	.150	50,313	2,030	.291
Oct. 1970	21,848	3,157	.453	72,161	2,273	.326

26. DATE OF SURVEY 5/	39. AV. DRY WGT., LBS. PER CU. FT.	40. SED. DEP., TONS PER SQ. MI.-YR.		41. STORAGE LOSS, PCT.		42. SED. INFLOW, PPM	
		a. PERIOD	b. TOTAL TO DATE	a. AV. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE
May 1940	75.7*		236	0.17	0.23	16,687	16,687
June 1942	75.7	1,643	1,113	.78	2.66	9,810	10,177
Nov. 1942	75.7		1,243	.88	3.33	11,223	10,372
Oct. 1944	75.7	541	1,009	.71	4.05	19,348	11,310
Feb. 1949	75.7	581	818	.58	5.81	24,808	13,543
Oct. 1963	75.7	247	479	.34	8.37	8,743	11,621
Oct. 1970	75.7	746	537	.38	12.00	24,376	13,806

*Estimated

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26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	178-128	128-108	108-88	88-68	68-58	58-48	48-38	38-28	28-Crest	Crest-17	17-29	
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
May 1940												
June 1942												
Nov. 1942												
Oct. 1944	16	4	7	10	6	10	15	16	16			
Feb. 1949	13	4	5	9	5	7	11	14	14	16	2	
Oct. 1963	9	9	8	15	9	11	13	11	8	7		
Oct. 1970	3	7	12	10	5	6	8	11	33	4	1	

26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR													
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-108	-110	-118	-120	-128
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
May 1940 6/	114	23	3	-26	-16	2				S. Canadian Arm					
	30	22	7	10	18	13				Conchas Arm					
June 1942	6	3	4	4	22	14	27	18	2	S. Canadian Arm					
	20	21	-12	12	13	27	5	14		Conchas Arm					
Nov. 1942	6	2	5	8	16	16	29	16	2	S. Canadian Arm					
	-1	0	1	2	19	57	5	14	3	Conchas Arm					

45. RANGE IN RESERVOIR OPERATION

WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1947	4,202.46	4,199.00	129,330	1959	4,200.38	4,193.40	112,620
1948	4,201.46	4,195.63	154,700	1960	4,199.37	4,192.68	181,530
1949	4,200.97	4,192.50	153,260	1961	4,201.75	4,196.55	216,440
1950	4,198.59	4,185.88	131,410	1962	4,201.13	4,193.08	119,280
1951	4,194.68	4,184.24	106,770	1963	4,193.01	4,176.16	76,510
1952	4,184.15	4,168.23	125,930	1964	4,178.58	4,156.06	31,060
1953	4,176.16	4,162.07	107,950	1965	4,201.83	4,157.61	394,190
1954	4,173.22	4,155.80	32,030	1966	4,200.77	4,192.25	108,660
1955	4,190.37	4,157.10	297,760	1967	4,195.35	4,185.79	142,740
1956	4,189.98	4,173.19	51,880	1968	4,193.13	4,183.51	113,130
1957	4,175.40	4,163.80	129,930	1969	4,193.65	4,180.65	192,830
1958	4,201.82	4,173.97	336,510	1970	4,197.55	4,189.30	105,630

46. ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
4,230	16,380	709,119	4,180	5,513	173,912	4,110	311	1,299
4,220	14,110	556,724	4,170	4,333	125,102	4,100	2	24
4,218	13,664	528,951	4,160	3,394	86,519	4,090	1	9
4,210	11,845	426,866	4,150	2,642	56,348	4,080		2
4,201	9,692	330,124	4,140	1,950	33,495	4,070	0	0
4,200	9,463	320,546	4,130	1,323	17,170	4,060	0	0
4,190	7,290	237,119	4,120	797	6,690			

47. REMARKS AND REFERENCES

1/ Emergency Spillway Crest at 4218.
2/ Conchas 13.8 miles.
3/ From climatic Atlas dated June 1968.
4/ This figure affected by water taken out above reservoir for irrigation.
5/ Totals computed to end of each month shown.
6/ Only dates computed.

48. AGENCY MAKING SURVEY Albuquerque District Corps of Engineers
49. AGENCY SUPPLYING DATA Corps of Engineers
50. DATE May 1970

April 1966

RESERVOIR SEDIMENT
DATA SUMMARY

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER	2. STREAM	3. STATE
	4. SEC. TWP. RANGE	5. NEAREST P. O.	6. COUNTY
	7. LAT. ° ' " LONG. ° ' "	8. TOP OF DAM ELEVATION	9. SPILLWAY CREST ELEV.

RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. ORIGINAL SURFACE AREA, ACRES	13. ORIGINAL CAPACITY, ACRE-FEET	14. GROSS STORAGE, ACRE-FEET	15. DATE STORAGE BEGAN
	a. FLOOD CONTROL					
	b. MULTIPLE USE					
	c. POWER					
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN
	e. IRRIGATION					
	f. CONSERVATION					
	g. INACTIVE					
	17. LENGTH OF RESERVOIR MILES			AV. WIDTH OF RESERVOIR MILES		

WATERSHED	18. TOTAL DRAINAGE AREA SQ. MI.		22. MEAN ANNUAL PRECIPITATION INCHES
	19. NET SEDIMENT CONTRIBUTING AREA SQ. MI.		23. MEAN ANNUAL RUNOFF INCHES
	20. LENGTH MILES	AV. WIDTH MILES	24. MEAN ANNUAL RUNOFF AC.-F T.
	21. MAX. ELEV.	MIN. ELEV.	25. ANNUAL TEMP: MEAN RANGE

SURVEY DATA

26. DATE OF SURVEY	27. PERIOD YEARS	28. ACCL. YEARS	29. TYPE OF SURVEY	30. NO. OF RANGES OR CONTOUR INT.	31. SURFACE AREA, ACRES	32. CAPACITY, ACRE-FEET	33. C/I. RATIO, AC.-FT. PER AC.-FT.

26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW, ACRE-FEET			36. WATER INFL. TO DATE, AC.-FT.	
		a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE

26. DATE OF SURVEY	37. PERIOD CAPACITY LOSS, ACRE-FEET			38. TOTAL SED. DEPOSITS TO DATE, ACRE-FEET		
	a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR

26. DATE OF SURVEY	39. AV. DRY WGT., LBS. PER CU. FT.	40. SED. DEP., TONS PER SQ. MI.-YR.		41. STORAGE LOSS, PCT.		42. SED. INFLOW, PPM	
		a. PERIOD	b. TOTAL TO DATE	a. AV. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE

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26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											

26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														

45. RANGE IN RESERVOIR OPERATION

WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.

46. ELEVATION–AREA–CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

48. AGENCY MAKING SURVEY

49. AGENCY SUPPLYING DATA

50. DATE ______

USDA-SCS-HYATTSVILLE MD. 1966

April 1966

REFERENCES FOR APPENDIX F

Miscellaneous Publication No. 1266, U.S. Department of Agriculture, Sedimentation Laboratory, Oxford, Mississippi, July, 1973.

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APPENDIX G

INITIAL DILUTION TABLES

The Tables are ordered as follows:

Tables N_1	Port Spacing (PS) (Diameters)
1-20	2
21-40	5
41-60	10
61-80	25
81-100	1000 (effluent from each port acts as a single plume)

Tables N_2	Current Velocity to Effluent Velocity Ratio (k)
1-5	0.1
6-10	0.05
11-15	0.02
16-20	0.00 (no current)

Tables N_3	Composite Stratification Parameter (SP)
1	200 (high stratification)
2	500
3	2000
4	10000
5	infinity (no stratification)

After finding N_1, N_2, and N_3 the appropriate Table number is:

$$N_1 + N_2 + N_3 - 2$$

TABLE 1

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.10

```
                                     DENSIMETRIC FROUDE NUMBER
                        1             3            10            30           100          1000
RISE(DIA)  ---------------------------------------------------------------------------------------
           : T)                                                                                  !
           : M)               2.2(  0.4)   2.1(  0.0)   2.1(  0.0)   2.1(  0.0)   2.1(  0.0)     !
    1      :         1.9          2.7          4.3          7.0         13.0         48.5        !
           : T)                                                                                  !
           : M)                                                                                  !
    2      :         2.7          3.3          5.1          8.5         15.8         60.9        !
           : T)                                                                                  !
           : M)                                                                                  !
    3      :         3.5          3.8          5.7          9.5         17.9         70.5        !
           : T)                                                                    75.5(  3.6)   !
           : M)   4.3(  3.7)                                                                     !
    4      :         4.5          4.2          6.2         10.3         19.6         78.7        !
           : T)                                                                                  !
           : M)                                                                                  !
    5      :         5.4          4.7          6.7         11.1         21.1         88.6        !
           : T)                                                                                  !
           : M)                                                                                  !
    7      :         7.0          5.6          7.7         12.6         23.6                     !
           : T)                                                                                  !
           : M)                                                                                  !
    9      :         8.5          6.6          8.6         13.8         26.0                     !
           : T)                                                       27.1( 10.0)                !
           : M)                                                                                  !
   12      :        10.7          7.8          9.9         15.8         29.4                     !
           : T)                                                                                  !
           : M)                                                                                  !
   15      :        12.8          9.2         11.2         17.6         33.6                     !
           : T)                                          18.1( 15.9)                             !
           : M)                                                                                  !
   20      :        16.1         11.3         13.6         21.0                                  !
           : T)  16.9( 21.3)  13.5( 25.0)  14.3( 21.7)                                           !
           : M)                                                                                  !
   25      :        19.2                      16.2                                               !
           : T)                                                                                  !
           : M)                                                                                  !
   33      :                     17.5                                                            !
           : T)                                                                                  !
           : M)                                                                                  !
           ---------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  35.3( 31.0)  26.8( 36.6)  23.0( 32.5)  25.6( 24.8)  37.2( 16.2) 104.0(  5.8)
```

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TABLE 2

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.10

```
                               DENSIMETRIC FROUDE NUMBER

                    1          3          10         30         100        1000
RISE(DIA) ----------------------------------------------------------------------
          : T)                                                                  :
          : M)           2.2(  0.4) 2.1(  0.0) 2.1(  0.0) 2.1(  0.0) 2.1(  0.0) :
    1     :      1.9        2.7        4.3        7.0       12.9       48.1     :
          : T)                                                                  :
          : M)                                                                  :
    2     :      2.7        3.3        5.1        8.4       15.8       60.1     :
          : T)                                                                  :
          : M)                                                                  :
    3     :      3.6        3.8        5.7        9.5       17.7       68.5     :
          : T)                                                                  :
          : M) 4.3(  3.8)                                                       :
    4     :      4.5        4.2        6.2       10.3       19.4       75.5     :
          : T)                                                                  :
          : M)                                                                  :
    5     :      5.4        4.7        6.7       11.1       20.8       81.5     :
          : T)                                                                  :
          : M)                                                                  :
    7     :      7.0        5.6        7.6       12.5       23.3       93.0     :
          : T)                                                      94.3(  7.3) :
          : M)                                                                  :
    9     :      8.5        6.6        8.5       13.7       25.3      104.0     :
          : T)                                                                  :
          : M)                                                                  :
   12     :     10.9        7.8        9.8       15.5       28.0                :
          : T)                                                                  :
          : M)                                                                  :
   15     :     13.1        9.2       11.0       17.3       30.7                :
          : T)                                           35.0( 20.2)            :
          : M)                                                                  :
   20     :     16.7       11.4       13.0       20.0                           :
          : T)                                                                  :
          : M)                                                                  :
   25     :     20.3       13.6       15.0       22.8       39.4                :
          : T)                                25.6( 30.0)                       :
          : M)                                                                  :
   33     :     25.5       16.9       18.5       27.5                           :
          : T) 26.5( 34.8)           21.4( 39.2)                                :
          : M)                                                                  :
   42     :     30.7       20.8       22.9       33.4                           :
          : T)           21.0( 42.6)                                            :
          : M)                                                                  :
   54     :                26.5       32.2                                      :
          : T)                                                                  :
          : M)                                                                  :
          ----------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  59.3( 50.2)  44.9( 61.0)  36.8( 56.8)  37.0( 45.6)  48.3( 31.9) 131.0( 11.7)
```

TABLE 3

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.10

RISE(DIA)		DENSIMETRIC FROUDE NUMBER 1	3	10	30	100	1000
	T)						
	M]		2.2[0.4]	2.1[0.0]	2.1[0.0]	2.1[0.0]	2.1[0.0]
1		1.9	2.7	4.3	7.0	12.9	48.1
	T)						
	M]						
2		2.7	3.3	5.1	8.4	15.8	59.7
	T)						
	M]						
3		3.6	3.8	5.7	9.5	17.7	67.6
	T)						
	M]	4.3[3.8]					
4		4.5	4.2	6.2	10.3	19.3	74.0
	T)						
	M]						
5		5.4	4.7	6.7	11.0	20.7	79.8
	T)						
	M]						
7		7.0	5.6	7.6	12.4	23.1	89.2
	T)						
	M]						
9		8.6	6.6	8.5	13.6	25.1	96.9
	T)						
	M]						
12		10.9	7.9	9.7	15.3	27.7	107.0
	T)						
	M]						
15		13.2	9.2	10.9	17.0	30.0	116.0
	T)						
	M]						
20		17.0	11.4	12.8	19.7	33.8	131.0
	T)						132.0(20.7)
	M]						
25		20.8	13.6	14.7	22.3	37.5	145.0
	T)						
	M]						
33		26.7	17.0	17.8	26.3	42.8	176.0
	T)						
	M]						
42		33.1	21.0	21.3	31.1	48.8	
	T)					56.1(53.4)	
	M]						
54		41.6	26.2	25.8	37.3	56.7	
	T)						
	M]						
70		52.0	32.9	32.7	45.9	67.2	
	T)	52.6(71.3)	41.3(90.3)	41.1(89.4)	47.1(72.5)		
	M]						
90		63.2		41.6	57.8		
	T)						
	M]						
115			53.1	59.6			
	T)						
	M]						
DIL AT MAX REAL OR PERMITTED RISE		125.0(102.0)	96.1(128.0)	76.2(125.0)	69.5(106.0)	78.7(82.7)	104.0(33.4)

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TABLE 4

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.10

DENSIMETRIC FROUDE NUMBER

RISE(DIA)		1	3	10	30	100	1000
	T)						
	M)		2.2[0.4]	2.1[0.0]	2.1[0.0]	2.1[0.0]	2.1[0.0]
1		1.9	2.7	4.3	7.0	12.9	48.1
	T)						
	M)						
2		2.7	3.3	5.1	8.4	15.8	59.7
	T)						
	M)						
3		3.6	3.8	5.7	9.5	17.7	67.6
	T)						
	M)	4.3[3.8]					
4		4.5	4.2	6.2	10.3	19.3	74.0
	T)						
	M)						
5		5.4	4.7	6.7	11.0	20.7	79.3
	T)						
	M)						
7		7.0	5.6	7.6	12.4	22.9	88.0
	T)						
	M)						
9		8.6	6.6	8.5	13.6	24.9	95.6
	T)						
	M)						
12		10.9	7.9	9.7	15.3	27.7	105.0
	T)						
	M)						
15		13.3	9.2	10.9	17.0	30.0	113.0
	T)						
	M)						
20		17.0	11.4	12.8	19.7	33.6	125.0
	T)						
	M)						
25		21.0	13.6	14.7	22.2	37.2	135.0
	T)						
	M)						
33		27.1	17.1	17.6	26.2	42.5	149.0
	T)						
	M)						
42		33.8	21.1	21.0	30.5	48.1	163.0
	T)						
	M)						
54		42.8	26.3	25.3	36.5	55.3	180.0
	T)						200.0(68.9)
	M)						
70		54.9	33.3	31.1	44.0	64.7	201.0
	T)						
	M)						
90		69.3	41.9	38.3	53.8	76.0	228.0
	T)						
	M)						
115		87.0	52.6	47.5	66.2	90.4	
	T)						
	M)						
148		109.0	66.5	60.1	82.9	109.0	
	T)	117.0(161.0)			101.0(182.0)	110.0(150.0)	
	M)						
190		133.0	83.9	77.5	106.0	133.0	
	T)		91.5(209.0)	90.4(217.0)			
	M)						
244			107.0	107.0	140.0		
	T)						
	M)						
DIL AT MAX REAL OR PERMITTED RISE		225.0(232.0)	224.0(293.0)	176.0(297.0)	152.0(260.0)	155.0(224.0)	244.0(99.9)

TABLE 5

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.10

```
                                 DENSIMETHIC FROUDE NUMBER

                    1             3            10            30           100          1000
RISE(DIA)  -----------------------------------------------------------------------------------------
           : M)               2.2[  0.4]   2.1[  0.0]   2.1[  0.0]   2.1[  0.0]   2.1[  0.0]   :
    1      :       1.9        2.7           4.3          7.0         12.9          48.1        :
           : M)                                                                                :
    2      :       2.7        3.3           5.1          8.4         15.8          59.3        :
           : M)                                                                                :
    3      :       3.6        3.8           5.7          9.5         17.7          67.6        :
           : M)  4.3[  3.8]                                                                    :
    4      :       4.5        4.2           6.2         10.3         19.3          74.0        :
           : M)                                                                                :
    5      :       5.4        4.7           6.7         11.0         20.7          79.3        :
           : M)                                                                                :
    7      :       7.0        5.6           7.6         12.4         22.9          88.0        :
           : M)                                                                                :
    9      :       8.6        6.6           8.5         13.6         24.9          95.6        :
           : M)                                                                                :
   12      :      10.9        7.9           9.7         15.3         27.7         105.0        :
           : M)                                                                                :
   15      :      13.3        9.2          10.9         17.0         30.0         113.0        :
           : M)                                                                                :
   20      :      17.1       11.4          12.8         19.6         33.6         124.0        :
           : M)                                                                                :
   25      :      21.0       13.6          14.6         22.2         37.0         133.0        :
           : M)                                                                                :
   33      :      27.1       17.1          17.6         26.2         42.2         147.0        :
           : M)                                                                                :
   42      :      34.0       21.1          20.8         30.5         47.8         159.0        :
           : M)                                                                                :
   54      :      43.1       26.3          25.1         36.2         54.9         174.0        :
           : M)                                                                                :
   70      :      55.3       33.3          30.9         43.7         64.4         191.0        :
           : M)                                                                                :
   90      :      71.0       42.2          38.0         53.0         75.5         210.0        :
           : M)                                                                                :
  115      :      89.6       53.0          46.8         64.5         89.2         232.0        :
           : M)                                                                                :
  148      :     115.0       67.5          58.3         79.5        107.0                      :
           : M)                                                                                :
  190      :     147.0       85.8          73.0         98.8        130.0                      :
           : M)                                                                                :
  244      :     188.0      109.0          92.0        123.0        158.0                      :
           : M)                                                                                :
           -----------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 231.0(300.0) 134.0(301.0) 111.0(300.0) 149.0(300.0) 188.0(301.0) 257.0(147.0)
```

(97)

TABLE 6

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.05

```
                                  DENSIMETRIC FROUDE NUMBER

                      1            3            10           30           100          1000
RISE(DIA)  --------------------------------------------------------------------------------------
           : T)                                                                                :
           : M)              2.1(  0.4)   2.1(  0.0)   2.1(  0.0)   2.1(  0.0)   2.1(  0.0)    :
    1      :         1.9       2.6          4.0          6.3         10.9         36.5         :
           : T)                                                                                :
           : M)                                                                                :
    2      :         2.7       3.2          4.6          7.4         13.0         44.9         :
           : T)                                                                                :
           : M)                                                                                :
    3      :         3.6       3.6          5.1          8.1         14.5         51.2         :
           : T)                                                                                :
           : M)   4.2(  3.7)                                                                   :
    4      :         4.5       4.0          5.5          8.8         15.7         56.5         :
           : T)                                                              59.3(  4.6)       :
           : M)                                                                                :
    5      :         5.4       4.4          5.8          9.3         16.7         61.8         :
           : T)                                                                                :
           : M)                                                                                :
    7      :         6.9       5.1          6.4         10.2         18.5         74.0         :
           : T)                                                                                :
           : M)                                                                                :
    9      :         8.4       5.9          7.0         11.0         20.0                      :
           : T)                                                 22.2( 12.1)                    :
           : M)                                                                                :
   12      :        10.4       7.0          7.7         12.0                                   :
           : T)                                                                                :
           : M)                                                                                :
   15      :        12.5       8.1          8.5         13.0         24.2                      :
           : T)                                    14.2( 18.8)                                 :
           : M)                                                                                :
   20      :        15.6       9.8          9.7         14.6                                   :
           : T)  16.5( 21.6)                                                                   :
           : M)                                                                                :
   25      :        18.4      11.4         10.9         16.5                                   :
           : T)             12.1( 27.2)  11.1( 25.9)                                           :
           : M)                                                                                :
   33      :                  13.8         13.0                                                :
           : T)                                                                                :
           : M)                                                                                :
           --------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  29.4( 31.7)  20.4( 40.7)  17.0( 40.3)  19.6( 30.5)  29.9( 19.6)  81.1(  7.6)
```

(93)

TABLE 7

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 500
CURRENT TO EFFLUENT RATIO = 0.05

```
                           DENSIMETRIC FROUDE NUMBER

                    1            3           10           30          100         1000
RISE(DIA)  ------------------------------------------------------------------------------------
           : T)                                                                               :
           : M)                   2.1(  0.4)   2.1(  0.0)   2.1(  0.0)   2.1(  0.0)   2.1(  0.0) :
     1     :      1.9          2.6          4.0          6.3         10.9         36.5        :
           : T)                                                                               :
           : M)                                                                               :
     2     :      2.7          3.2          4.6          7.4         13.0         44.6        :
           : T)                                                                               :
           : M)                                                                               :
     3     :      3.6          3.6          5.1          8.1         14.4         50.2        :
           : T)                                                                               :
           : M)   4.3(  3.7)                                                                  :
     4     :      4.5          4.0          5.5          8.8         15.6         54.9        :
           : T)                                                                               :
           : M)                                                                               :
     5     :      5.4          4.4          5.8          9.3         16.6         59.3        :
           : T)                                                                               :
           : M)                                                                               :
     7     :      6.9          5.2          6.4         10.1         18.2         66.2        :
           : T)                                                                               :
           : M)                                                                               :
     9     :      8.4          5.9          7.0         10.9         19.7         72.4        :
           : T)                                                                 73.5(  9.3) :
           : M)                                                                               :
    12     :     10.6          7.0          7.7         11.9         21.4         82.7        :
           : T)                                                                               :
           : M)                                                                               :
    15     :     12.7          8.1          8.4         12.7         23.1                     :
           : T)                                                                               :
           : M)                                                                               :
    20     :     16.2          9.9          9.6         14.1         25.4                     :
           : T)                                                    27.5( 24.5)                :
           : M)                                                                               :
    25     :     19.6         11.7         10.7         15.6         27.8                     :
           : T)                                                                               :
           : M)                                                                               :
    33     :     24.6         14.4         12.5         17.6         31.7                     :
           : T)  25.8( 35.4)                           18.9( 37.8)                             :
           : M)                                                                               :
    42     :     29.4         17.4         14.4         20.1                                  :
           : T)               18.6( 46.3)  15.9( 48.6)                                          :
           : M)                                                                               :
    54     :                  21.0         17.3         24.2                                  :
           : T)                                                                               :
           : M)                                                                               :
    70     :                               22.8                                               :
           : T)                                                                               :
           : M)                                                                               :
           ------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  50.6( 51.5)  34.8( 68.1)  26.9( 73.2)  27.2( 59.1)  37.4( 39.8) 101.0( 15.0)
```

TABLE 8

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 2000
CURRENT TO EFFLUENT RATIO = 0.05

```
                                    DENSIMETRIC FROUDE NUMBER

                         1             3            10            30           100          1000
RISE(DIA)  --------------------------------------------------------------------------------------------
           : T)                                                                                    :
           : M)                  2.1[  0.4]   2.1[  0.0]   2.1[  0.0]   2.1[  0.0]   2.1[  0.0]    :
    1      :           1.9          2.6          4.0           6.3         10.9          36.5      :
           : T)                                                                                    :
           : M)                                                                                    :
    2      :           2.7          3.2          4.6           7.4         13.0          44.3      :
           : T)                                                                                    :
           : M)                                                                                    :
    3      :           3.6          3.6          5.1           8.1         14.4          49.8      :
           : T)                                                                                    :
           : M)     4.3[  3.7]                                                                     :
    4      :           4.5          4.0          5.5           8.7         15.6          54.5      :
           : T)                                                                                    :
           : M)                                                                                    :
    5      :           5.4          4.4          5.8           9.3         16.6          58.0      :
           : T)                                                                                    :
           : M)                                                                                    :
    7      :           6.9          5.2          6.4          10.1         18.1          64.4      :
           : T)                                                                                    :
           : M)                                                                                    :
    9      :           8.5          6.0          6.9          10.9         19.4          69.5      :
           : T)                                                                                    :
           : M)                                                                                    :
   12      :          10.6          7.1          7.7          11.8         21.1          76.6      :
           : T)                                                                                    :
           : M)                                                                                    :
   15      :          12.8          8.2          8.4          12.6         22.6          82.3      :
           : T)                                                                                    :
           : M)                                                                                    :
   20      :          16.4         10.1          9.5          14.0         24.8          91.3      :
           : T)                                                                                    :
           : M)                                                                                    :
   25      :          20.1         11.9         10.6          15.2         26.7          99.4      :
           : T)                                                                   101.0( 26.5)     :
           : M)                                                                                    :
   33      :          25.8         14.8         12.4          17.1         29.6         112.0      :
           : T)                                                                                    :
           : M)                                                                                    :
   42      :          32.0         18.0         14.3          19.2         32.7         131.0      :
           : T)                                                                                    :
           : M)                                                                                    :
   54      :          39.9         22.3         16.8          21.9         36.7                    :
           : T)                                                    41.4( 68.8)                     :
           : M)                                                                                    :
   70      :          49.6         27.7         20.2          25.3         41.8                    :
           : T)     51.1( 72.6)                                                                    :
           : M)                                                                                    :
   90      :          60.0         34.3         24.4          30.1         48.7                    :
           : T)                 36.7( 98.7)  29.6(115.0)  31.9( 98.1)                              :
           : M)                                                                                    :
  115      :                       41.5                       36.7                                 :
           : T)                                                                                    :
           : M)                                                                                    :
  148      :                                    37.9                                               :
           : T)                                                                                    :
           : M)                                                                                    :
           --------------------------------------------------------------------------------------------

DIL AT MAX RISE
OR PERMITTED RISE 117.0(105.0)  77.9(143.0)  58.3(167.0)  51.0(147.0)  58.0(109.0) 140.0( 43.3)
```

TABLE 9

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 10000
CURRENT TO EFFLUENT RATIO = 0.05

```
                                         DENSIMETRIC FROUDE NUMBER

                          1              3              10              30             100            1000
 RISE(DIA)   ------------------------------------------------------------------------------------------------------
             : T)                                                                                                  :
             : M)                  2.1[  0.4]     2.1[  0.0]      2.1[  0.0]      2.1[  0.0]      2.1[  0.0]       :
     1       :           1.9          2.6            4.0             6.3            10.9            36.2           :
             : T)                                                                                                  :
             : M)                                                                                                  :
     2       :           2.7          3.2            4.6             7.4            13.0            44.3           :
             : T)                                                                                                  :
             : M)                                                                                                  :
     3       :           3.6          3.6            5.1             8.1            14.4            49.8           :
             : T)                                                                                                  :
             : M)      4.3[  3.7]                                                                                  :
     4       :           4.5          4.0            5.5             8.7            15.6            54.1           :
             : T)                                                                                                  :
             : M)                                                                                                  :
     5       :           5.4          4.4            5.8             9.3            16.4            58.0           :
             : T)                                                                                                  :
             : M)                                                                                                  :
     7       :           6.9          5.2            6.4            10.1            18.1            63.9           :
             : T)                                                                                                  :
             : M)                                                                                                  :
     9       :           8.5          6.0            6.9            10.8            19.4            69.0           :
             : T)                                                                                                  :
             : M)                                                                                                  :
    12       :          10.7          7.1            7.7            11.8            21.1            75.5           :
             : T)                                                                                                  :
             : M)                                                                                                  :
    15       :          12.9          8.2            8.4            12.6            22.5            80.8           :
             : T)                                                                                                  :
             : M)                                                                                                  :
    20       :          16.6         10.1            9.5            13.9            24.6            88.6           :
             : T)                                                                                                  :
             : M)                                                                                                  :
    25       :          20.2         11.9           10.6            15.1            26.5            95.4           :
             : T)                                                                                                  :
             : M)                                                                                                  :
    33       :          26.0         14.8           12.4            17.0            29.2           105.0           :
             : T)                                                                                                  :
             : M)                                                                                                  :
    42       :          32.7         18.2           14.3            18.9            32.2           113.0           :
             : T)                                                                                                  :
             : M)                                                                                                  :
    54       :          41.3         22.6           16.8            21.4            36.0           124.0           :
             : T)                                                                                                  :
             : M)                                                                                                  :
    70       :          52.7         28.4           20.2            24.6            40.4           136.0           :
             : T)                                                                                 151.0( 89.8)     :
             : M)                                                                                                  :
    90       :          66.6         35.7           24.4            28.6            46.1           151.0           :
             : T)                                                                                                  :
             : M)                                                                                                  :
   115       :          83.1         44.6           29.4            33.5            53.0           170.0           :
             : T)                                                                                                  :
             : M)                                                                                                  :
   140       :         104.0         55.8           36.4            40.0            62.1                           :
             : T)    114.0(165.0)                                                                                  :
             : M)                                                                                                  :
   190       :         127.0         69.6           44.9            48.5            74.0                           :
             : T)                 81.4(229.0)                                    77.7(204.0)                       :
             : M)                                                                                                  :
   244       :                       85.9           55.8            60.4            89.8                           :
             : T)                               64.0(285.0)     66.0(267.0)                                        :
             : M)                                                                                                  :
             ------------------------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE 185.0(239.0) 101.0(300.0)  67.8(300.0)  75.7(301.0) 108.0(300.0) 191.0(138.0)
```

TABLE 10

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = INFINITE
CURRENT TO EFFLUENT RATIO = 0.05

```
                                         DENSIMETRIC FROUDE NUMBER

                        1             3             10            30            100           1000
RISE(DIA)    ---------------------------------------------------------------------------------------------
             : M]                 2.1[  0.4]    2.1[  0.0]    2.1[  0.0]    2.1[  0.0]    2.1[  0.0]   :
    1        :          1.9           2.6           4.0           6.3          10.9          36.2        :
             : M]                                                                                       :
    2        :          2.7           3.2           4.6           7.4          13.0          44.3        :
             : M]                                                                                       :
    3        :          3.6           3.6           5.1           8.1          14.4          49.8        :
             : M]     4.3[  3.7]                                                                        :
    4        :          4.5           4.0           5.5           8.7          15.6          54.1        :
             : M]                                                                                       :
    5        :          5.4           4.4           5.8           9.3          16.4          58.0        :
             : M]                                                                                       :
    7        :          6.9           5.2           6.4          10.1          18.1          63.9        :
             : M]                                                                                       :
    9        :          8.5           6.0           6.9          10.8          19.4          69.0        :
             : M]                                                                                       :
   12        :         10.7           7.1           7.7          11.8          21.1          75.0        :
             : M]                                                                                       :
   15        :         12.9           8.2           8.4          12.6          22.5          80.8        :
             : M]                                                                                       :
   20        :         16.6          10.1           9.5          13.9          24.6          88.2        :
             : M]                                                                                       :
   25        :         20.2          11.9          10.6          15.1          26.5          94.5        :
             : M]                                                                                       :
   33        :         26.2          14.9          12.4          16.9          29.2         103.0        :
             : M]                                                                                       :
   42        :         32.7          18.2          14.3          18.9          32.2         112.0        :
             : M]                                                                                       :
   51        :         41.6          22.6          16.8          21.4          35.7         121.0        :
             : M]                                                                                       :
   70        :         53.0          28.6          20.2          24.6          40.3         132.0        :
             : M]                                                                                       :
   90        :         68.1          36.0          24.4          28.4          45.7         144.0        :
             : M]                                                                                       :
  115        :         86.3          45.2          29.6          33.1          52.2         156.0        :
             : M]                                                                                       :
  148        :        110.0          57.5          36.5          39.1          60.9         172.0        :
             : M]                                                                                       :
  190        :        141.0          73.0          45.1          46.8          71.3         189.0        :
             : M]                                                                                       :
  244        :        180.0          92.7          56.3          56.5          84.8                      :
             : M]                                                                                       :
             ---------------------------------------------------------------------------------------------

DIL AT MAX REAL
ON PERMITTED RISE 221.0(300.0) 113.0(301.0)  67.8(300.0)  66.5(301.0)  98.4(301.0) 201.0(221.0)
```

TABLE 11

DIFFUSER PLUME DILUTION
PORT SPACING = 2 DIAMETERS, STABILITY STRATIFICATION PARAMETER = 200
CURRENT TO EFFLUENT RATIO = 0.02

```
                                    DENSIMETRIC FROUDE NUMBER

                        1            3            10           30           100          1000
RISE(DIA)   ------------------------------------------------------------------------------------
            : T)                                                                              :
            : M)               2.1(  0.4    2.0(  0.0)   2.0(  0.0)   2.0(  0.0)   2.0(  0.0)  :
    1       :          1.9          2.6          3.8          5.8          9.7         27.8     :
            : T)                                                                              :
            : M)                                                                              :
    2       :          2.7          3.1          4.4          6.7         11.2         33.3     :
            : T)                                                                              :
            : M)                                                                              :
    3       :          3.6          3.5          4.8          7.4         12.4         37.2     :
            : T)                                                                              :
            : M)   4.2(  3.7)                                                                 :
    4       :          4.5          3.9          5.1          7.8         13.3         40.5     :
            : T)                                                                              :
            : M)                                                                              :
    5       :          5.3          4.3          5.4          8.3         13.9         43.4     :
            : T)                                                                45.5(  5.8)   :
            : M)                                                                              :
    7       :          6.8          5.0          6.0          8.9         15.2         48.8     :
            : T)                                                                              :
            : M)                                                                              :
    9       :          8.2          5.7          6.4          9.5         16.2         55.7     :
            : T)                                                                              :
            : M)                                                                              :
   12       :         10.3          6.7          7.0         10.3         17.6                  :
            : T)                                                    18.5( 14.2)               :
            : M)                                                                              :
   15       :         12.2          7.7          7.6         10.9         18.9                  :
            : T)                                                                              :
            : M)                                                                              :
   20       :         15.3          9.3          8.5         12.0         21.1                  :
            : T)   16.2( 21.8)                          12.2( 21.4)                           :
            : M)                                                                              :
   25       :         17.9         10.9          9.3         13.0                               :
            : T)                11.6( 28.0)   9.9( 28.3)                                      :
            : M)                                                                              :
   33       :                      13.0         10.6         14.8                               :
            : T)                                                                              :
            : M)                                                                              :
   42       :                      15.5         12.2                                            :
            : T)                                                                              :
            : M)                                                                              :
            ------------------------------------------------------------------------------------

DIL AT MAX REAL
OR PERMITTED RISE  24.0( 32.1)  16.6( 42.2)  13.5( 45.1)  16.0( 35.2)  24.1( 23.2)  60.7(  9.5)
```